

### Fun-DUCT-Raiser – Fundraising Information

The Fun-DUCT-Raiser was created as an event:

- 1. For people to have fun at Spryfield's beautiful Long Lake Park as part of the first annual Spryfield Days community event and;
- 2. As a fundraiser to support the Long Lake Provincial Park Association [LLPPA], a non-profit volunteer group that funds the Park's operations.

Event expenses and organizing efforts for the Fun-DUCT-Raiser are being paid for by POLYCORP Group, a Spryfield area business [2016 Spryfield Business of the Year].

3M Canada has very generously donated approximately \$17,000 worth of their premium quality duct tape to the event to support this community fundraising event so that participants do not need to spend money on duct tape [the good stuff is pricey – this 3M stuff is not the cheap stuff that they sell at the dollar store – it's premium!]

There is no entry fee to participate in the event. Instead, teams are asked to raise as much money as they can in sponsorships to fund the LLPPA. 100% of funds raised go to the Long Lake Park Association to fund park operation and facilities expansion.

More info on the event is available at Funductraiser.org, with a link to a GoFundMe page.

Suggested sponsorship targets for teams:

Family	Youth	Corporate/Community	Open Class
\$500	\$200	\$1000	\$500

Don't feel obligated to raise this much – just do the best you can and come out and have some fun at the park while raising money for a great cause!

Please direct sponsors to the central GoFundMe page for their pleages or collect the money and make the donation under your own name...but try to keep a rough running tally on your pleages. Please ask people to put your name in the comments section when they make a donation via GoFundMe to make it easier to track.

We had to pick a target goal when we set up the GoFundMe page... so we picked a figure of \$100,000... we have no idea how much we can raise... but every dollar that we raise can normally be multiplied with different grant programs for the LLPPA ... so every dollar raised is valuable. Let's see how much we can raise for this fabulous community gem, Long Lake Park.

Let's Get Quacking!!!





### Race Day Schedule

**Location:** Long Lake Provincial Park

Pre-race line-up: 12 pm - 1:00 pm

Please line up your duct tape boat in the 'old pumphouse boat launch' parking area on Old Sambro Road (opposite Schnare Street). You may temporarily park your vehicles/trailers in the parking lot (5-10 min maximum) while unloading, but please move them out of the parking lot once finished. Parking is also available on the surrounding streets, and at South Centre Mall, Dentith Road (only a 5-minute walk from the boat launch area).

Judging: 1:00 pm - 1:30 pm

All duct tape boats must be lined up along the lake, to the east or west side of the boat launch area by noon to participate in the judging for most creative duct tape boat.

Duct Tape Boat races: 2 pm

Boats will race around a short course that will be clearly marked. Once finished, please take your boats with you or discard in the Old Sambro Road parking lot.

### **Duct Tape Boat Divisions:**

1. Family

This division is for participants 8 years and older. It is intended for families.

#### 2. Youth

This division is for participants aged 12 to 17. The boats must be built, decorated and paddled by youth of this age group with very limited adult involvement.

### 3. Corporate/Community

This division is open to corporate and community groups.

#### 4. Open Class

This division is open to any age (minimum of 8 years old) or group who wishes to participate.

#### **Heats**

Heats will consist of, at most, 5 boats at a time. Boats with the fastest times in the preliminary heats will advance to the semi-finals and finals, depending on the number of qualified teams (that do not sink...).

#### Awards: Following the Race

Once the races are over, please join us at the boat launch area for the announcement of awards. Certificates will be given out to the winners to commemorate their success!

## Fun-DUCT-Raiser Registration & Waiver Form July 14, 2018 • Long Lake Provincial Park

(please print clearly)

Boat Name:					
				(Office Use Only)	
Boat Class (circle one)	<b>FAMILY</b> 8 yrs & older	YOUTH Ages 12 - 17	CORPORATE/ COMMUN GROUPS	OPEN CLASS 8 yrs & older	
Name of Captain:					
Address:				Age:	
City:		Provinc	ce:Po	Postal Code:	
Phone:		Email Addr	ess:		
Crew Members Riding in	n Boat (Up to 3	additional rid	ers with Captain): 1.		
2	3		4		
participating in the event, the cor may be other risks either not knot responsibility for losses, costs, a release, discharge, and covenant officers, volunteers, and employed the Activity takes place, (each co account caused or alleged to be each of the negligent rescue ope on my and/or my minor child's be	nditions in which the own to me or not rea and damages I incur at not to sue Long La ees, other participar onsidered one of the caused in whole or erations; and I furthe ehalf makes a claim amage, liability, or co	e event takes place adily foreseeable at as a result of my n ake Provincial Park nts, any sponsors, as "RELEASEES" he in part by the negli or agree that if, des against any of the ost which may occu	this time; and I fully accept and as egligence as a result of my particip Association, their respective adminative advertisers, and if applicable owner brein) for all liability, claims, demand gence of the "RELEASEES", I will in the properties of the series, waiver or liability, "RELEASEES", I will indemnify, saur as a result of such claim. I have the	EES" named below, and that there sume all such risks and all ation in this event. I hereby nistrators, directors, agents, is and lessors of premises on which ds, losses or damages on my ndemnify, save, and hold harmless and assumption of risk I, or anyone we and hold harmless each of the	
Captain Signature:			Do	ate:	
Parent Signature if unde	er 18:				
Crew Signature:		Parer	nt Signature if under 18: _	re if under 18:	
Crew Signature:		Parer	nt Signature if under 18: _	ure if under 18:	
Crew Signature:		Parer	nt Signature if under 18:		

Signed Registration/Waiver forms are required for all sailors riding in the boat. All sailors must be at least 8 years old. Please return completed forms by email to <a href="mailto:polyadmin@polycorp.co">polyadmin@polycorp.co</a> on or before 4:00 pm July 13, 2018. Forms will also be accepted until 11 am on July 14, 2018 at the launch area of Long Lake Park.





#### **GENERAL RACE RULES**

- NO pets allowed in the boats.
- Throwing water on another boat and/or unsafe behaviour = disqualification.
- Sunken boats (it happens...) must be dragged to parking lot surface for disposal. Entrants must collect all parts that may become separated from boats in the lake.
- During the competition, the crew must be IN the boat. They cannot be towing it in, pushing it, or holding onto it from the outside. IN means IN!
- No swimming or using a PFD (personal flotation device) to aid boat flotation.
- Unsportsmanlike behaviour will result in disqualification.
- All race participants must sign a waiver and release agreement prior to the race.
- If your boat sinks, your team must exit the water immediately without interfering with the other participants.
- Every crew member must wear a personal flotation device (PFD) and proper footwear.
- All propulsion must be from the entrants and is limited to one oar or paddle per person; kayak type double-ended paddles are allowed.
- No more than 4 people per boat.
- Minimum age of crew is 8 years old. Children under the age of 12 must have an adult in the boat with them.
- Crew costumes and themes are encouraged.
- Boats must be labelled with a name. The name must be in letters/numbers at least 4" high.
- **JUDGES** will decide on the interpretation of the RULES in the event that there is ambiguity or unforeseen situations.

#### **AWARDS**

- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place finishes will be awarded per boat division.
- **Creativity Award** boats will be judged on design, appearance and originality. Appearance may include consideration for costumes worn by the boat crew.
- **Titanic Award** this award will be given to the most spectacular sinking.
- **People's Choice Award** determined by the volume of the crowd on race day when the question is asked.



#### **CONSTRUCTION RULES**

- The ENTIRE boat must be built of cardboard and duct tape.
- Only exceptions are paddles and decorations. Regular canoe/kayak paddles are allowed.
- Decorations are encouraged as long as they don't affect structural strength or buoyancy.
- The crew compartment CANNOT be enclosed so as to interfere with escape from a potentially sinking boat.
- Use cardboard boxes, cardboard "blocks" or carpet tubes. Cardboard can be as thick as you want.
- NO pre-treated cardboard allowed (i.e., pre-waterproofed since that would be cheating!).
- NO Sona-tubes waxed or 'treated' cardboard since that would be cheating too!
- NO wood, plastic, fiberglass, Styrofoam, rubber or other flotation aids.
- Latex paint is the only type of paint allowed on the outside/inside of the boats.
- NO caulking compounds, single, two-part/mixed adhesives, epoxies, varnishes, sealants, sealant type paints, or oil paints (and we have a simple, secret test to tell the difference between latex paint & all other products people may try to sneak by us!)
- NO wrapping in plastic, fiberglass sheet or resins, or peel and stick waterproofing membranes.
- Duct tape may be used to reinforce seams.
- Hull wrapping with duct tape is allowed for waterproofing purposes (inside & outside of boat).
- Waterproof the boat with duct tape ONLY.
- NO electrical, gas, benzene, propane or any other chemicals or air propulsion system is allowed.
- Illegal boat materials = disqualification. If uncertain about eligibility of a cardboard type material, ask organizers for an official ruling.

#### **DUCT TAPE SUPPLY**

- Each team will be given 6 rolls of 3M Performance Plus Duct Tape.
- Rolls are 55 metres long x 4.8 cm wide = 2.64m<sup>2</sup>. With a 25% overlap, this yields 1.98m<sup>2</sup> surface area coverage (approximately 21 square feet). So, 6 rolls = +/- 120 square feet surface area.
- The duct tape has been generously donated by 3M Canada. Retail value of the product approximately \$25.00 per roll + tax. A limited quantity of extra rolls is available to contestants at \$10 per roll.
- NO hoarding of the premium quality 3M Duct Tape please! Leftover rolls will be saved by the organizers for next year's event.
- Contact organizers to make arrangement to get your duct tape starter pack.

#### **CONSTRUCTION MATERIALS**

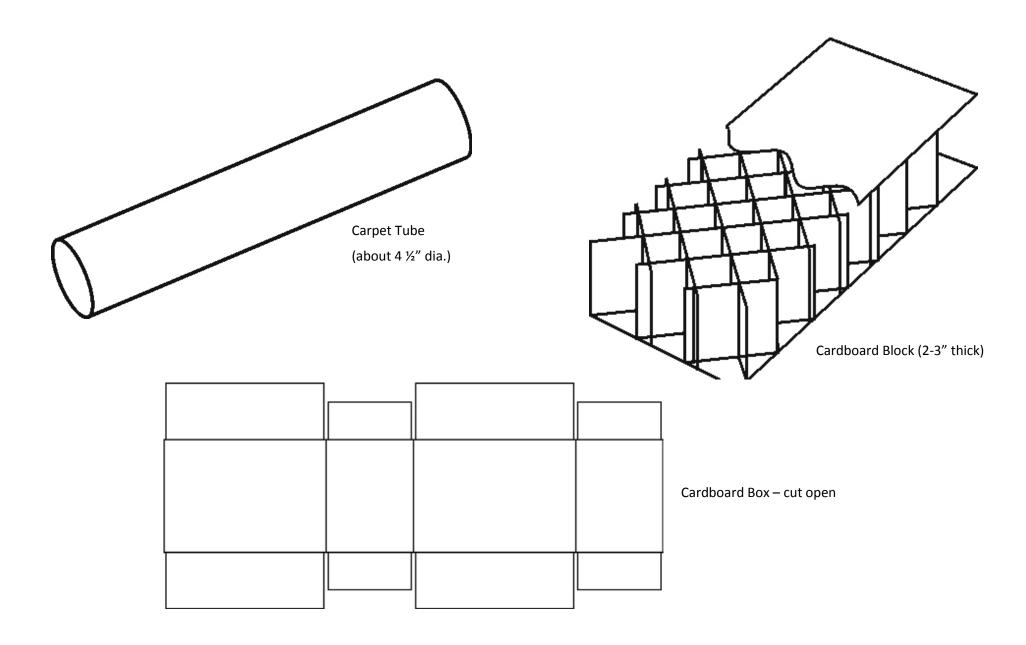
### **Permissible Materials**

#### **Materials NOT Allowed**

corrugated cardboard – appliance & grocery	wood, Styrofoam, plastic sheathing	
cardboard "blocks" – furniture stores	Sona-tubes, coated cardboard	
cardboard tubes – flooring stores	silicon, wax, tar, caulking compounds	
fastening material – duct tape only	fiberglass, resins, paint (except for above water decorations)	
latex paint	metal, staples, clamps, screws, nails	
decorations (cannot affect structural strength or buoyancy	ballast type devices – sand bags, rock, brick, etc.	



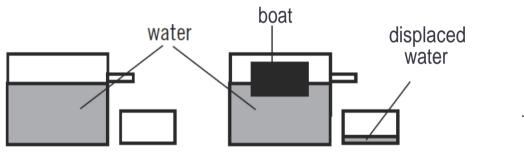
## **CONSTRUCTION MATERIALS**

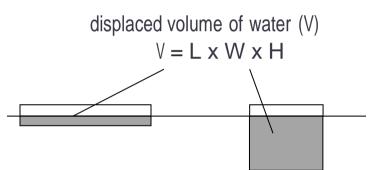


## DISPLACEMENT



## How much will you sink? - Displacement





Weight of Water = 62.4 pounds/cubic-foot

Water Displaced (ft³) =

Weight-of-boat-& people-lbs 62.4 lbs/ft<sup>3</sup>-H20

Depth (ft) boat sinks

**EXAMPLE**:

Box boat, 3ft x 6ft, 1ft tall (high)

Boat volume =  $3' \times 6' \times 1' = 18 \text{ ft}^3$ 

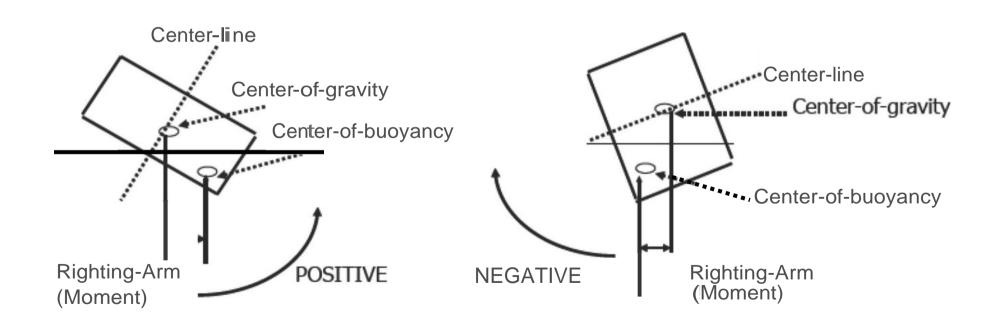
Boat displacement =  $18 \text{ ft}^3 \times 62.4 \text{ lbs/ft}^3 = 1123.2 \text{ lbs}$ 

Which equates to 93.6 lbs per inch of boat height





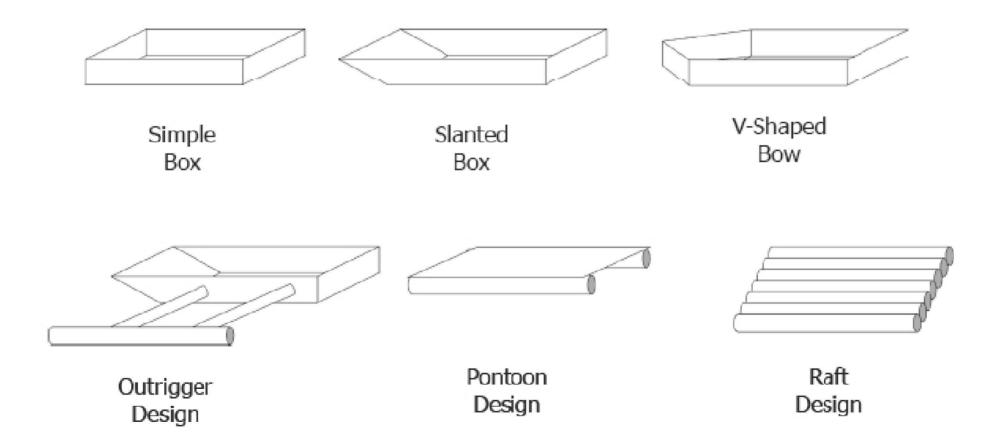
## Wider is steadier- Center of Buoyancy



# DESIGN



## **Basic boat styles**



# DESIGN



## **Suggestions & Considerations:**

- O Set the Design Goal: Fun, Speed and Appearance
- O Sketch out your design
  - O build a scale model from manila paper:
    - estimate materials or plan how to use what you have
    - plan out what construction techniques will be used
- O A box measuring 1'x1'x3' will float 187 lbs.
  - O if it's big enough to hold you, it will float you (in theory)
- O Flat bottom, sit-to-paddle & canoe styles have been the most popular and successful designs in the past at other similar race events.
- O Rudders help keep you straight but make turning difficult and adds complexity to your design

- O Long boats go fast- but are harder to turn
- O Short boats (<8') are difficult to paddle straight
- O Best Length: 8-12 feet
- O Best Height 18 inches
  - O allows room to sit/kneel & still paddle over the edge
- O Best Width:
  - O 18"-30"(max) for 2 or more people in a row
  - O Minimum 48" wide for 2 people side by side
- O Kneeling is a "power" position but sitting is more comfortable



## **Construction Tips & Techniques:**

- O Cover all edges and joints cardboard acts like a siphon
- O Cardboard Tubes make great frames
  - O Cut for joining & bending
- O Cardboard Hull
  - O 1 or more layers, fasten & cover the seams
  - O With 2 layers, overlap the seams & duct tape like crazy.
  - O Decorate with paint (if desired)
- O Reinforce the area where the crew will sit, kneel or stand

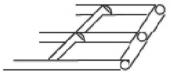
- O Duct tape only non-painted surfaces (tubes or frame that will be covered)
  - O Duct tape shrinks when painted



## **Construction Tips & Techniques:**



Solid Tube Frame

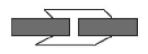


Center/Cross Beam Frame

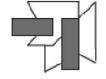
**FRAMES** 

### CONNECTING TUBES

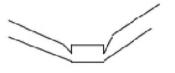
Cardboard Wrapper for Tubes End-to-End



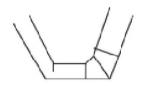
Cardboard Wrapper for Tubes At Right-Angles



### FRAME ANGLES



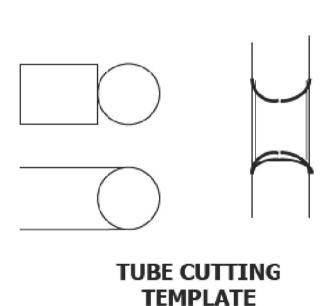
V-Shaped Cuts

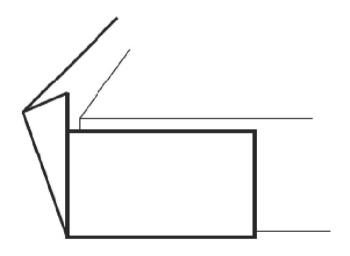


Multiple Cuts for Sharper Angles



## **Construction Tips & Techniques:**





FOLD & OVERLAP CARDBOARD AROUND CORNERS



## **Construction Tips & Techniques:**

