

**Fundraising / Registration / Sponsorship Information**

Thanks for being fun and adventurous by registering your crew for this year’s race! We are on a mission to exceed last year’s record 🦆 of over \$4,000 raised for this area of Long Lake Park, a community gem.

There is **no entry fee** to participate in the event. Local Spryfield-area business, POLYCORP, has paid for event expenses and all organizing efforts for the Fun-DUCT-Raiser since its inception in 2018.

Instead, teams are asked to **raise money via donations and sponsorships**. Feel good knowing that 100% of funds raised are used to support the care and improvement of the Lakeview & Waterfront Trails, facilities, and water access points. 🦆

Suggested sponsorship targets for crews are noted below.

Youth	Family	Open Class	Corporate / Community
\$200	\$500	\$500	\$1,000

Also offered is a **pre-fab boat**, generously supplied by our sponsor, Maritime Paper. This gets you a boat that simply needs to be assembled using tape provided by POLYCORP (no having to source cardboard yourself!). And the set price of \$199 goes towards your sponsorship total.

The event also receives media support from Hot Country 103.5 & Surge 105 via radio ads and Mooseheads Announcer 🎤 Ian Robinson 🎤 on site to call the race. And of course, we cannot do this without the generous donation of premium quality duct tape by 3M Canada!

**How to donate:**

All detailed information can be found on the website: [www.funductraiser.org/donate](http://www.funductraiser.org/donate).

You can direct your sponsors to [www.GoFundMe.com/funductraiser](http://www.GoFundMe.com/funductraiser) for an online 🇺🇸 donation; you can collect money from sponsors and either donate online under your own name; bring the money raised on race day; or send an e-transfer to QuackyFDR@outlook.com. Whatever works best!

Let’s Get Quacking!!!





## Construction Rules

- The **ENTIRE** boat must be built of cardboard and duct tape. Only exceptions are paddles and decorations (which are **HIGHLY** encouraged, as long as they don't affect structural strength or buoyancy). Regular canoe/kayak paddles are also allowed.
- Latex paint is the only type of paint allowed on the outside/inside of the boats.
- The crew compartment **CANNOT** be enclosed to ensure escape from a sinking boat.
- Use cardboard boxes, cardboard "blocks" or carpet tubes, of any thickness.
- **NO** pre-treated cardboard or Sona-tubes waxed or 'treated' cardboard allowed (i.e., nothing that has been pre-waterproofed since that would be cheating!).
- **NO** wood, plastic, fiberglass, Styrofoam, rubber or other flotation aids.
- **NO** caulking compounds, single, two-part/mixed adhesives, epoxies, varnishes, sealants, sealant type paints, or oil paints (and we can tell! 😊)
- **NO** wrapping in plastic, fiberglass sheet or resins, or peel-and-stick waterproofing membranes.
- **NO** electrical, gas, benzene, propane or any other chemicals or air propulsion system is allowed.
- Duct tape may be used to reinforce seams.
- Hull wrapping with duct tape is allowed for waterproofing purposes (inside & outside of boat). This is the only acceptable way to waterproof your boat.
- **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 of surface area.
- The duct tape has been generously donated by 3M Canada. Retail value of the product approximately \$25.00 per roll + tax.
- No hoarding of the premium quality 3M Duct Tape please! Leftover rolls should be returned to the organizers to be saved for next year's event.
- Contact organizers to make arrangement to get your duct tape starter pack. 902-431-9917

## CONSTRUCTION MATERIALS

Allowed	NOT Allowed
Corrugated cardboard (can find at appliance & grocery stores)	Wood, Styrofoam, plastic sheathing
Cardboard "blocks" (can find at furniture stores)	Sona-tubes, coated cardboard
Cardboard tubes (can find at 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 – and bags, rock, brick, etc.



## General Race Rules

- Boats must be labelled with a name. The name must be in letters/numbers at least 4" high.
- Crew costumes and themes are encouraged.
- Minimum age of crew is 8 years old. Children under the age of 12 must have an adult in the boat with them.
- No more than 4 people per boat.
- Every crew member must wear a personal flotation device (PFD) and proper footwear.
- 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!
- All propulsion must be from the entrants and is limited to one oar or paddle per person; double-ended kayak-style paddles are allowed.
- No swimming or using a PFD (personal flotation device) to aid boat flotation.
- If your boat sinks, your team must exit the water immediately without interfering with the other participants.
- 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.
- Throwing water on another boat and/or unsafe behaviour = disqualification.
- Behaviour considered unbecoming a sportsperson will result in disqualification.
- No pets allowed in the boats.
- All race participants must sign a waiver and release agreement prior to the race.
- Judges will decide on the interpretation of the rules in the event there is ambiguity or unforeseen situations.

## Awards

First, second and third place will be awarded for:

- **Top three overall race times**
- **Creativity Award** – boats will be judged on design, appearance and originality; appearance might also include consideration for costumes worn by the boat crew
- **Titanic Award** – for the most spectacular sinkings
- **People's Choice Award** – as voted by the spectators



## **Race Day Schedule**

**Location:** Long Lake Provincial Park, Waterfront Trail Boat Launch Area, 75 Old Sambro Road

### **Pre-race line-up: 11 am – 11:45 am**

All boats must be on site, registered, and have their boat number secured to the vessel by 12:00pm. The parking lot has limited space and will be used for unloading of boats only. Please move your vehicle and park on the surrounding streets or at South Centre Mall on Dentith Road.

### **Judging: 12:00 pm**

Our judges will choose the winner of most creative boat.

### **Duct Tape Boat races: immediately following the judging**

When your boat is called, you'll place it in the water at the starting point. We will have volunteers on hand to keep your boat steady before you start, or you can bring someone with you to do that. Boats will race from the boat launch to a buoy approximately 80m away, paddle around the buoy and back to the start point.

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

1. Family :: Families with children a minimum of 8 years old.
2. Youth :: Aged 12 to 17. The boats must be built and decorated with very limited adult involvement and must be paddled by the youth.
3. Corporate/Community :: Businesses and community groups.
4. Open Class :: Open to any age (8+ years old) or group who wishes to participate.

### **Heats:**

Heats will consist of, at most, 4 boats at a time. Boats with the fastest times in the preliminary heats will race again in a final round to determine the winners.

### **Awards: Following the Race**

Once the races are over, head over to the media tent to pick up your award and have your picture taken with Quacky and Ian Robinson, emcee of the race. Highly coveted certificates will be given out to the winners to commemorate their success!

**Finally:** At the end of the race, please take your boat with you or discard it in the designated spot in the parking lot.



## SUGGESTIONS & CONSIDERATIONS

- Set design goal: Fun, Speed & Appearance
- Sketch out your design
- Build a scale model from manila paper
- Estimate materials or plan how to use what you have
- Plan out what construction technique will be used
- A box measuring 1' x 1' x 3' will float 187 lbs
- In theory: If it's big enough to hold you, it will float you
- Flat bottom, sit-to-paddle & canoe styles have been the most popular and successful designs in the past
- Long boats go fast, but are harder to turn
- Short boats (<8') are difficult to paddle straight
- Best Length: 8-12'
- Best Height: 18" (allows room to sit/kneel & still paddle over the edge)
- Best Width: 18"- 30" (max) for 2 or more people in a row  
Minimum 48" wide for 2 people side by side
- Kneeling is a "power" position but sitting is more comfortable

## Basic boat styles



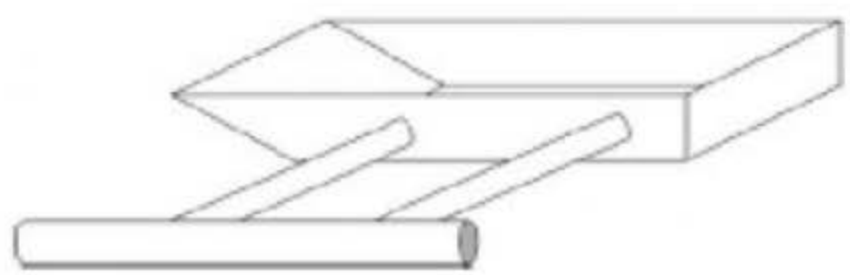
Simple  
Box



Slanted  
Box



V-Shaped  
Bow



Outrigger  
Design



Pontoon  
Design



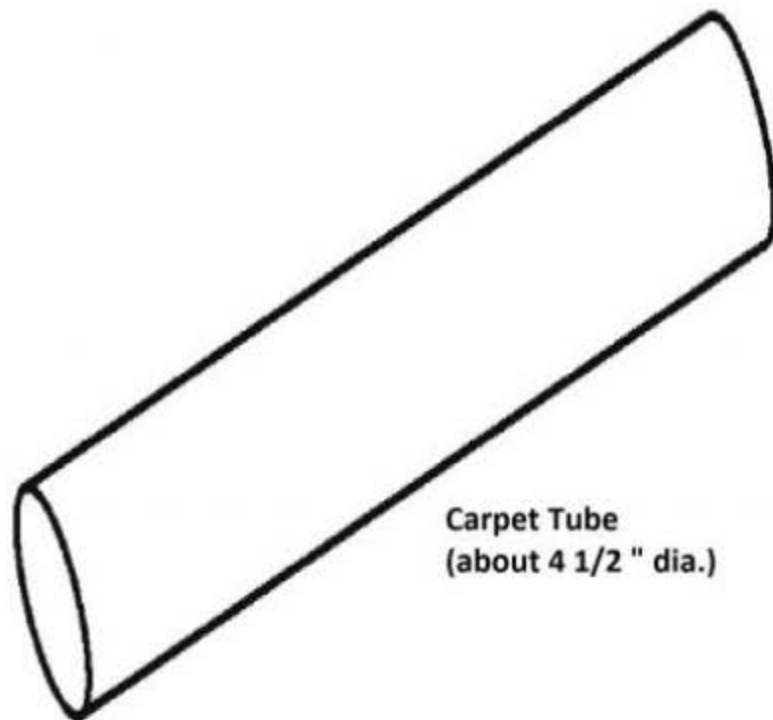
Raft  
Design

## SUGGESTIONS

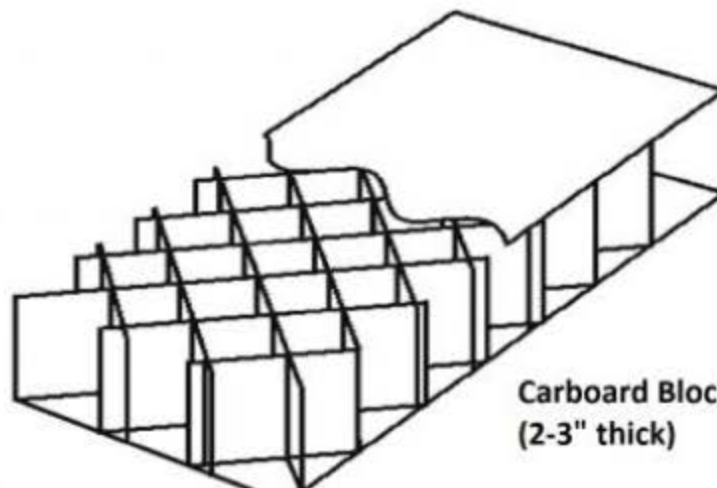
- Cover all edges and joints. Cardboard acts like a siphon
- Cardboard tubes make great frames. (Cut for joining & bending)
- Cardboard Hull: 1 or more layers, fasten & cover the seams. With 2 layers, overlap the seams & duct tape like crazy. Decorate with Latex paint (if desired).
- Reinforce the area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

# CONSTRUCTION

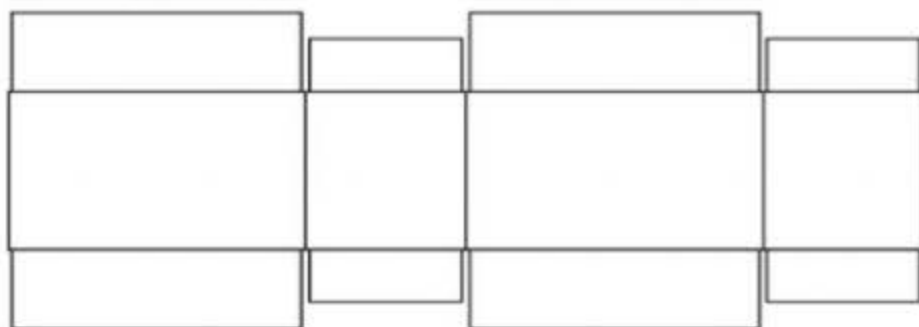
**FUN DUCT RAISER**.ORG  
duct tape & cardboard boat races



Carpet Tube  
(about 4 1/2 " dia.)



Carboard Block  
(2-3" thick)



Cardboard Box - cut  
open

## FRAMES



Solid Tube  
Frame



Center/Cross  
Beam  
Frame

## FRAME ANGLES



V-Shaped Cuts



Multiple Cuts  
for Sharper Angles

## CONNECTING TUBES

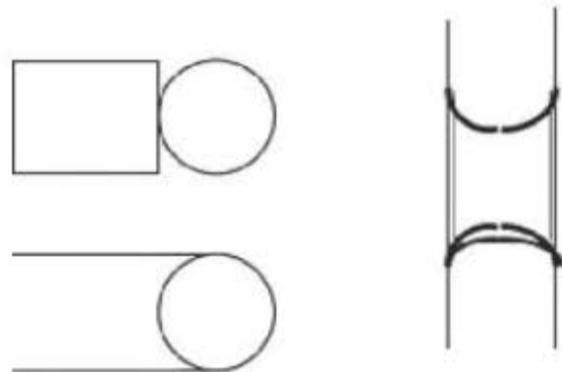
Cardboard  
Wrapper for Tubes  
End-to-End



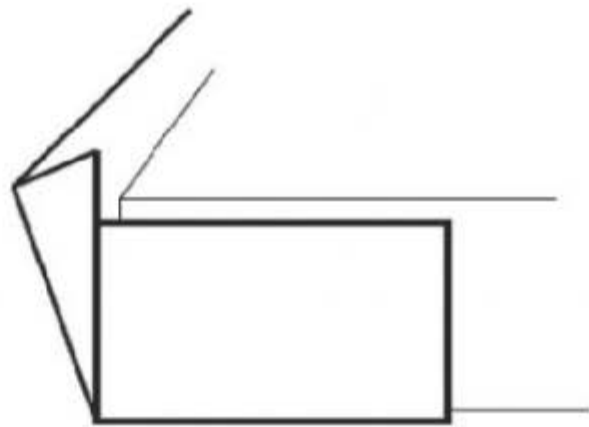
Cardboard  
Wrapper for Tubes  
At Right-Angles



# CONSTRUCTION



**TUBE CUTTING  
TEMPLATE**

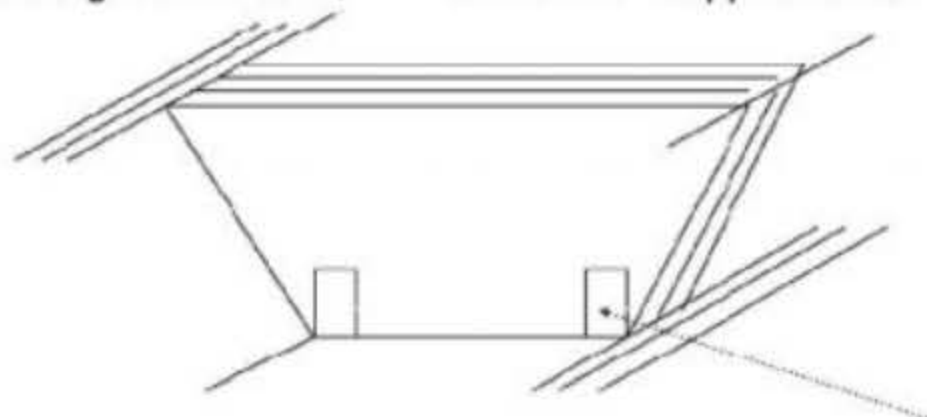


**FOLD & OVERLAP  
CARDBOARD  
AROUND CORNERS**

# CONSTRUCTION

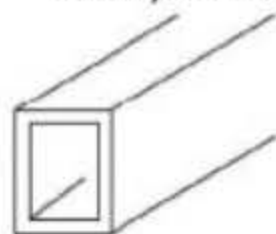
FUN DUCT RAISER.ORG  
duct tape & cardboard boat races

Multiple cardboard layers  
"adhered" together with duct tape  
on the sides strengthen *the hull*



Multiple trapezoid-shaped pieces  
"adhered" together with duct tape  
to form a "support block"

A sheet of cardboard  
could be folded &  
"adhered" together  
with duct tape to form  
*tubes/beams*



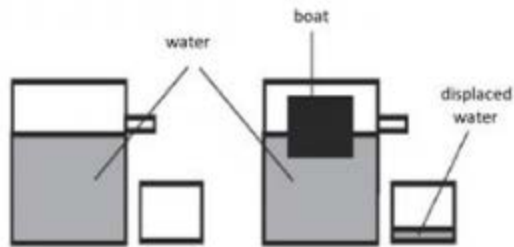
Crease/Score a line  
for a nice

STRAIGHT  
FOLD

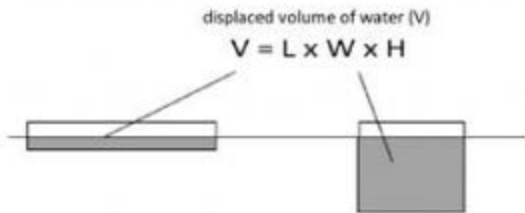


# DISPLACEMENT

## HOW MUCH WILL YOU SINK?



Weight of Water =  
62.4 pounds/cubic-foot



Water displaced (ft<sup>3</sup>) =  $\frac{\text{weight-of-boat \& people (lbs)}}{62.4 \text{ lbs/ft}^3\text{-H}_2\text{O}}$

Depth (ft) boat sinks \_\_\_\_\_

Example: Box boat, 3 ft x 6 ft tall (high)  
Boat volume = 3' x 6' x 1' = 18ft<sup>3</sup>  
Boat displacement = 18 ft<sup>3</sup>x 62.4 lbs/ft<sup>3</sup>= 1123.2 lbs  
Which equates to 93.6 lbs per inch of boat height

## WIDER IS STEADIER

