



## Barrel Carts



### **Contents**

(Tap to quickly navigate)

1. [About the activity and learning outcomes](#)
2. [Important safety rules](#)
3. [How to build a basic cart](#)
4. [How to tie a square lashing](#)
5. [Gallery for inspiration](#)
6. [Risk assessment](#)



## Barrel Carts

### About the activity

Your participant's challenge is to design and build a robust and working buggy. There'll be a number of components available, including large plastic barrels, ropes and poles. You can give as much or as little support as you'd like but it's a great teamwork exercise and will help your participants improve their communication, problem solving and decision-making. Once buggies are ready to be ridden, participants will attempt to complete a number of challenges such as completing a slalom course!

### Activity aims

The aim of this activity is to:

- Ensure participants work together supporting and encouraging each other.
- Increase confidence, self-awareness and general social skills.
- Develop communication, problem solving, leadership and teamwork skills.
- Provide an opportunity for participants to discuss what they have accomplished.

### Learning outcomes

Upon completion of the activity, participants will have:

- Demonstrated the ability to listen to, understand and act on instructions received.
- Developed the skills to work in small groups communicating effectively.
- Collaborated with others in a group to solve a problem or make a decision choosing strategies appropriate to the task.
- Effectively worked in small teams supporting their peers throughout the activity and recognising their achievements.
- Contributed to performance review led by the instructor identifying what they did well and then suggested ways to improve.



## Barrel Carts

### Important Safety

- Brief and monitor correct manual handling techniques to the group.
- “If it’s bigger than you, it takes two” approach to be taken when lifting or moving objects.
- Participants to be made aware of who is around them and what possible hazards to look for before carrying or placing equipment commences.
- Buggies should be built on the “track” to avoid carrying of completed structures.
- A clearly defined area or “track” should be used for completed buggies.
- Only active participants should be within “track” boundaries.
- “Track” or defined area should be level and not situated on a hill or slope.
- If a loop of rope is used to pull buggies, then participants must stand on the outside of the loop.
- Participants briefed to move out of the path of travel of the buggy if moving too fast or losing balance.
- All excess ropes are to be tied away to reduce chance of trip hazards and entanglement.
- Long hair to be tied back and kept away from moving parts.
- Loose jewellery to be removed and loose clothing to be tucked away.
- Participants riding the buggy to hold onto the buggy as it moves.
- Participants briefed not to put feet onto the floor at any time whilst on the buggy.
- The number of people on the buggy shall be determined by the Activity Leader dependent upon the size, type and stability of buggy constructed plus an even ratio of ‘riders’ to those pulling the buggy
- Activity Leader to check construction before participants are allowed to move or mount the buggy.
- Activity Leader to check the following points:
  - ✓ Lashings are tight and secure
  - ✓ Barrels are secure on the poles
  - ✓ Frame does not twist if pushed
  - ✓ Excess ropes tied away and not trailing
  - ✓ “Pulling” rope of suitable length
- Activity Leader to guide construction as required.



## Barrel Carts

### How to build a basic cart

#### In the provided box, you need:

- 8 x Black tipped ropes
- 1 x Yellow tipped rope
- 2 x Helmets

#### From the rack, you will need:

- 2 x Long pioneering poles
- 4 x Short pioneering poles
- 2 x Barrels

1. Lay out all of the parts as shown



2. Slide 1 short pole through each of the barrels to create your 'axel'





## Barrel Carts

3. With the 2 large pioneering poles, connect the 2 axels together to create the frame of the cart



4. Using 1 **black tipped** rope, lash the axel to the frame with a square lashing.

Tap to learn  
**“How to tie a square lashing”**





## Barrel Carts

5. Repeat this lashing on the other 3 corners where the axels connect to the frame. Make sure you use the **black tipped** ropes



6. Place the remaining 2 short poles on top of the frame as a seat and then square lash them in place using the remaining **black tipped** ropes





## Barrel Carts

7. Attach one end of your yellow tipped rope to the front axel of your barrel cart



8. Attach the other end of the rope on the opposite side of the front axel forming your tow rope and finishing your barrel cart





## Barrel Carts

### How to tie a square lashing

**1.** With one end of the rope, make a cross around your first pole.



**2.** Tuck the end of the rope under the top rope parallel with the bottom rope.



**3.** Pull the 2 ends tight to complete a clove hitch



**4.** With the remaining rope, wrap under the bottom pole...



**5.** ...then over the top pole, under the bottom pole, over the top...



**6.** Continue until you've completed 2 'laps'





## Barrel Carts

**7.** Now wrap around the 'laps' you just did to tighten it together.



**8.** complete 2 laps making sure you pull tight after each lap



**9.** Finish by completing another 'clove hitch' like we did at the start. It's good practice to finish on the other pole to what you started on



**10.** You have now completed a square lashing





# FRYLANDS WOOD SCOUT OUTDOOR CENTRE

## Barrel Carts

### Gallery





# FRYLANDS WOOD SCOUT OUTDOOR CENTRE

## Barrel Carts

### Risk Assessment

Activity: Barrel Carts		Reviewed By: Barry Goswell					Updated: Apr 2023		
Reviewed if methods change and/or after incidents, NOT reviewed annually									
Activity/Hazard	Who is at risk	Before Control Measures			Control Measures	After Control Measures			
		Likelihood 1-3	Severity 1-3	Risk Rating	Please see Generic Site Risk Assessment for explanation of risk ratings	Likelihood 1-3	Severity 1-3	Risk Rating	
<b>Accidents and First Aid</b>									
Instructor Qualifications	Staff, users & other site users	2	2	4	<ul style="list-style-type: none"> <li>No specific qualifications or permits are required to run the barrel carts, but the instructor must be fully trained and signed off, as detailed in the activity training requirements grid</li> <li>Explorer Crew aged 14 or over can supervise sessions but only if fully trained &amp; signed off, as detailed in the activity training requirements grid</li> <li>For self-led sessions, the activity must be supervised by a responsible person who takes overall charge of the session, is aware of this risk assessment and has signed the related conditions of use. This should ideally be someone aged 18 or over</li> <li>Instructors must be aware of this Risk Assessment &amp; the Generic Site RA</li> </ul>	1	2	2	
Previous or current Medical injury\condition	Users	2	3	6	<ul style="list-style-type: none"> <li>Ensure that participants have no injuries or suffer with back/neck problems</li> <li>Ensure no one has internal organ complaints that will be affected by the activity</li> </ul>	1	2	2	



## Barrel Carts

					<ul style="list-style-type: none"> <li>• Anyone who feels unwell, suffering from the effects of drugs/alcohol or pregnancy must not take part</li> </ul>			
Choking	Users	2	3	6	<ul style="list-style-type: none"> <li>• Ensure no food or drink including chewing gum etc. is being consumed during the activity</li> </ul>	1	2	2
Injury due to personal belongings	Users	2	2	4	<ul style="list-style-type: none"> <li>• Ensure that the participants do not have any personal items such as phones or keys in their pockets.</li> </ul>	1	1	1
Equipment failure	Staff & users	2	2	4	<ul style="list-style-type: none"> <li>• All equipment should be checked for obvious faults before, during and after each session</li> <li>• Any damage should be reported to the Duty Manager &amp; the equipment should not be used until inspected, repaired &amp; deemed safe</li> <li>• All equipment has a detailed inspection monthly &amp; results logged</li> </ul>	1	2	2
First Aid required	Staff, users & other site users	2	3	4	<ul style="list-style-type: none"> <li>• Group is responsible for having their own First Aid kit.</li> <li>• All staff on site is first aid trained and large First Aid kits are available at Reception, Providore &amp; Crew Hut</li> <li>• All staff aware of site emergency plan and carry a site radio</li> </ul>	1	3	3
Accidents General	Staff, users & other site users	2	3	6	<ul style="list-style-type: none"> <li>• Safety talk given to participants at start of session.</li> <li>• Max group size of 12 to 15 for 2 carts</li> <li>• Ensure the "track" is clear from bystanders &amp; other site users.</li> <li>• Cone and/or tape if site is busy e.g. large events</li> </ul>	1	3	3
Injuries arising from cart falling apart or unsafe construction	Users	2	3	4	<ul style="list-style-type: none"> <li>• Activity leader to guide construction as required</li> <li>• Activity leader to check construction before participants are allowed to move or mount the buggy</li> <li>• Activity leader to check the following points:               <ul style="list-style-type: none"> <li>○ Lashings are tight and secure</li> </ul> </li> </ul>	1	3	3



## Barrel Carts

					<ul style="list-style-type: none"> <li>○Barrels are secure on the poles</li> <li>○Frame does not twist if pushed</li> <li>○Excess ropes tied away and not trailing</li> <li>○“Pulling” rope of suitable length</li> </ul>			
Falling from cart	Users	2	3	6	<ul style="list-style-type: none"> <li>● Maximum of two people on the cart when being pulled</li> <li>● Helmets to be worn correctly fastened whilst on cart (see diagram at the end of the Risk Assessment)</li> <li>● It's a race but keep to safe speed for rider</li> </ul>	1	2	2
<b>Manual Handling</b>								
Injury from lifting and carrying equipment	Staff & users	2	2	4	<ul style="list-style-type: none"> <li>● Equipment moved from store to site for use by vehicle &amp; trailer if available.</li> <li>● Brief and monitor correct manual handling techniques to the group</li> <li>● “If it's bigger than you, it takes two” approach to be taken when lifting or moving objects</li> <li>● Participants to be made aware of who is around them and what possible hazards to look for before carrying or placing equipment commences</li> <li>● Barrel Carts should be built on the “track” to avoid carrying of completed structures</li> <li>● Storage of Barrel Carts building equipment should be close to the activity location to minimize the amount of manual handling necessary</li> </ul>	1	2	2
<b>Slips, Trips and Falls</b>								
Trip hazard on track	Staff & users	2	2	4	<ul style="list-style-type: none"> <li>● Check track is clear from cart building equipment &amp; branches etc</li> </ul>	1	2	2
Slips	Staff & users	3	2	4	<ul style="list-style-type: none"> <li>● Track may become too slippery in wet or snow/icy conditions. Stop session if required</li> </ul>	1	2	2
<b>Lighting</b>								



# FRYLANDS WOOD SCOUT OUTDOOR CENTRE

## Barrel Carts

Insufficient light increases risk of accidents	Staff, users & other site users	2	2	4	• Floodlights on Summer house should be switched on before evening sessions	1	2	2
<b>Electrical Safety</b>								
Shock from lights	Staff & Users	1	3	3	• Simple permanent circuit with appropriately IP rated LED lights used • Tested in the 5-year cycle of building electrical testing with the Summer house	1	3	3