

Mecklenburg County Council COPE & Climbing Milk Crate Stacking SOP

Overview

The purpose of this document is to set a standard means to facilitate climbing on a stack of milk crates at Belk Scout Camp and the Mecklenburg Scout Reservation.

The program element should be operated as a COPE activity and is approved for scouts according to the BSA's *Age Appropriate Guidelines*.

The aims and methods of the COPE program should be used when facilitating this element. As with most COPE elements, there is more than meets the eye. The facilitating instructor should emphasize the importance of communication, team building and problem solving as appropriate to the group of participants.



Qualified Supervision and Instructors

As a COPE element, milk crate stacking requires a COPE Director or COPE Level II instructor plus one other qualified instructor according to NCAP SQ-409. There will only be three or four participants involved in this activity at any one time so the ratios dictated by SQ-409 are met.

Equipment

Heavy duty milk crates must be used for this element. Inexpensive, lightweight plastic crates often used for home storage are not sufficient. The milk crates for this element are stored in the bottom of the climbing tower. They are to remain locked in the tower when not in use.

When climbing at Belk a wooden base plate can be used to provide support for the bottom of the stack of milk crates. This is also stored in the bottom of the Belk tower. This base plate is a sheet of plywood, approximately 3'x3' with a square of 2"x4" pieces attached to the plywood. The square of 2"x4" is the inner dimensions of a milk crate. Climbing at MSR does not use a wooden platform at this time.

A painter's extension pole (6' to 12') is used to pass up the milk crates to the climber as he/she ascends higher. This will be stored in the bottom of the climbing tower.

Top Rope Belay

A top rope belay must be rigged from the cable at the top of the rappelling face of the climbing tower. The following equipment will be needed:

- Shear Reduction Device (SRD)
- Locking carabiner
- Static rope
- Capture eye carabiner
- Belay friction device
- Locking carabiner
- Ground tarp

C.H.E.C.K.

Clothing and Footwear

Scouts should be dressed as they would for climbing on the tower. No loose clothing or items dangling from their body. Shirts should be tucked in. Hair should be pulled back.

Shoes should be tied or fastened tightly. No loose sandals, crocs or Keens. Scouts may borrow climbing shoes from the storage closet but they are not required or necessary.

Helmets and Harnesses

All participants must wear a helmet as with all of our climbing and high COPE elements.

Only the scout climbing and the belayer must wear a harness.

Environment

The same restrictions apply to this element as to the climbing tower when it comes to environmental conditions as per Weather Smart training.

Connections

All carabiners must be checked by the qualified instructor as with all of the climbing and high COPE elements.

Knots

All knots must be checked by the qualified instructor as with all of the climbing and high COPE elements.

Daily Inspection

Prior to facilitating this element, the tower must undergo the standard daily inspection. Furthermore, the qualified instructor must:

- Check the milk crates for excessive cracking or stress fractures.
- Check the base plate for excessive cracking or warping.
- Check the extension pole for cracking or warping.

Safety Briefing

The participants must be led in a safety briefing prior to beginning the activity. This is similar to the briefing that is given for the climbing tower however there are some important differences. The following points must be covered:

- Listen to the instructor
- No climbing on milk crates unless the climber is belayed
- Climbing area is inside the rock garden around the structure
 - Only the climber and spotter may be inside the rock garden
 - Bystanders (other scouts, parents, adults, etc.) must remain outside of the rock garden while climbing is in progress
- The belayer(s) must remain outside of the rock garden
- When the spotter is not passing up a milk crate to the climber, he/she must remain outside of the rock garden
- All climbing commands must be issued before climbing may begin
- Review proper climbing attire as well as the use of helmets and harnesses

Top Rope Belay

This element will be rigged on the standard rappelling side of each climbing tower (the south face at Belk). When climbing on the milk crates, rappelling must be suspended. If the zip lines at Belk are operating, only the zip line on the north face, the side with the American flag, may be operational. At MSR the zip may operate while climbing on milk crates.

The steel quick link on the life safety cable can be used to attach a shear reduction device to the cable. You may need to use a locking carabiner to attach the SRD to the steel quick link. The static belay rope must be threaded through the SRD and dropped over the side of the tower. Make sure to pay attention to which line will be the climbing line (closest to the tower) and which will be the belay line (away from the tower). Do not allow the lines to become switched or crossed. This will introduce extra friction making the belay more difficult. If an SRD is not available, then three oval locking carabiners may be used in an opposite and opposed fashion to create a top rope master point. The climbing rope must be threaded through the three carabiners. A sewn sling or runner may be used to attach the three carabiners to the quick link.

A low stretch or static rope must be used for the top rope belay of this element. The rope stretch in a dynamic rope increases the risk of a ground fall or fall onto a milk crate. Therefore, the climber must be belayed with a low stretch or static rope.

The capture eye carabiner must be tied to the climber's end of the rope using a Figure 8 Follow through knot with appropriate back up knot.

The belayer(s) will be stationed just outside of the rock garden (possibly with a foot against the rail road tie for stability). A back up belayer is highly recommended for this element since it is not possible to anchor to the guy wire pole with the length of the static ropes currently in use at each camp. The ground tarp should be used to help manage the rope and keep it out of the dirt.

Staging the Milk Crates and Extension Pole

The milk crates must be positioned off the rock garden on the grass. They are typically placed to the belayer's right. The milk crates must not be positioned such that they could interfere with the belayer(s) or cause a tripping hazard for the spotter.

No milk crates should be left lying on the ground of the rock garden. All crates should be moved outside of the rock garden in between climbing attempts.

The extension pole must not be left leaning against the tower or left lying on the ground of the rock garden. The extension pole should be placed outside of the rock garden with the milk crates when not in use or may be held by the spotter when waiting outside of the rock garden.

Facilitating the Element

As a COPE element, the participants should be encouraged to solve this puzzle and figure out how to stack and climb the milk crates. The facilitating instructor must watch for safety hazards and reduce the risk to all participants and bystanders at all times. The facilitating instructor should not tell the participants how to climb the crates but rather engage the other patrol members/bystanders to offer their encouragement and suggestions.

Before any climbing may begin, the participants must be CHECK'ed as for all of our climbing activities. Climbing commands must be followed by the climber and belayer. The climbing commands must be

reissued each time that the climber begins to ascend the stack of milk crates. It is too easy for the belayer(s) to become distracted and lose focus on the climber.

As the climber begins he/she should be spotted by a single participant, the spotter. The risk of ground fall is greatest during the first few crates. Once the climber is higher than about 4-5 crates the risk of ground fall has been reduced to the point that spotting is no longer required.

The spotter passes a milk crate to the climber by hand when the climber is within reach or using the extension pole as the climber goes higher (usually about 6 crates but could be less depending on the height of the climber and the spotter). The extension pole should be left as short as necessary to reach the climber. Do not extend the extension pole until necessary and even then, only extend the pole as much as is needed. The milk crate should be placed on the end of the pole so that it is easy to grab by the climber. Do not clip or tie the crate to the pole or thread the end of the pole through any of the holes on the milk crate.

The belayer should keep a watchful eye on the climber. If it looks as though the climber might fall, then slack should be taken out of the system. If the climber knows he is about to fall, he/she can issue the command "Falling!" or "Take" to the belayer. However, the belayer may find it necessary to give the climber a little bit of slack so that the climber can bend down to grab the milk crate and position it on the growing stack. The climber can ask for more rope using the command "Slack". The facilitating instructor must keep an eye on the amount of slack in the system as an excessive amount of slack risks a ground fall.

The belayer will be watching the climber, talking with him/her and the other participants. This is a normal aspect of this activity. Care must be taken that when the belayer is "resting" that he/she keeps the rope in the brake position of the belay device. A backup belayer is required whenever possible.

When the climber falls, knocks over the stack of milk crates or finishes climbing (either by choice or he/she runs out of milk crates to stack) the climber must be lowered gently to the ground by the belayer. If any milk crates are in the way of the climber, the spotter may move them to the side to allow the climber to reach the ground safely.

Topping Out

At Belk an option for this element is to have the door in the side of the tower open to allow the climber to "top out" when he reaches the door. This will require a qualified instructor to be present in the tower on the platform with the door. The door must be unlocked and secured and two tethers must be rigged on the life safety cable inside the door. One tether for the instructor and one tether for the climber. Once the climber has climbed inside the door he/she must be secured to the tether by the instructor before he/she may be taken off belay.

At MSR the top gate must be open in order for the climber to top out. A qualified instructor must be present at the top platform with two tethers. One for the instructor and one for the climber. Once the climber has climbed onto the platform he/she must be secured to the tether by the instructor before he/she may be taken off belay.

The stack of milk crates can be knocked over once the supervising instructor on the ground has cleared the area inside the guy wire posts of all participants.

Variations

The first time the scouts start to climb at Belk, do not give them the base plate. Let them try to stack the crates directly on the pea gravel. This surface is surprisingly unstable and caution must be taken to prevent a ground fall. When the participants realize they need a stable platform on which to level the crates, then bring the base plate out from inside the tower.

For the first few crates, allow the scouts to stack crates side by side as well as on top of one another. This makes climbing the first few crates easier and allows the participants to gain confidence. However, do not allow the participants to have more than three crates stacked vertically next to each other. In case of a fall, the climber could land on the stack of crates next to the stack on which he/she is climbing. As the climber moves above the three crates, the accompanying stack should be removed by the spotter.

Daily Shutdown

At the conclusion of the activity the milk crates must be returned to the inside of the climbing tower along with the base plate and extension pole. All of the hardware and equipment used for the top rope belay must be inspected, logged and returned to the climbing storage closet. The rope used for the belay should indicate "Milk Crate" in the rope log under Type of Use.