

Chain Basket – a.k.a. Rock Net

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After countless times having to re-wrap the chain around a rock we were moving, I decided there had to be something better. Nylon webbing was certainly a good approach – if you were not dragging the rock over the ground. What made the webbing great was that it cinched up on the rock and held it, no matter how it was shaped, but dragging it over the rocks and ledges around here would ruin a web in a heartbeat.

I toyed with the idea of using a more durable material in a manner similar to the web. Nothing much came to mind that didn't take major work to construct and/or cost a fortune. So, back to chain – it's cheap, durable and easy to work with. By making a kind of 'net bag' out of chain, I got what I was after. The cross pieces of the net make the whole thing hold onto the rock, conforming to whatever shape the rock presents; while the flying ends make enclosure quite flexible and easy. I used 1/4" proof coil chain which has a load rating of 1800# per strand. Since there will always be at least 2 strands holding the rock at any given time (and most rocks I plan to move are in the sub 900# class), that seems like good tradeoff between strength and weight. If you expect to move bigger stuff, just scale up the chain and fittings! (You may also want to make the legs of the 'X' longer.)

Please feel free to tinker with this design idea. I have made a couple of them like this for our crews here and they are a huge success. If you have suggestions, ideas, whatever – just pass the word back along.

Using it is simplicity itself.

1. Spread the net out on the ground along side the intended rock so that it is lined up with the rock, and far enough away to allow you to roll the rock onto it and have the rock land on the "X" made by the two cross chains.
2. Roll the rock onto the net, keeping the chain as flat as possible.
3. Pull the cross chains up and use the grab hook to connect the diagonal corners to each other. (Sometimes a big rock won't permit them to reach. In that case, connect the to two same-side corners and use a short web 'choker' to link the two loops.)
4. Place a shackle around the crossed chains (or on the web choker between them) and attach your lifting hook and haul away.

Materials:

- (2) 7' – 1/4" proof chain (*drawing is wrong!*)
- (1) 4' – 1/4" proof chain
- (1) 8' – 1/4" proof chain
- (2) 1/4" grab hooks, clevis style
- (11) 3/8" hex machine screws (grade 3+)
- (22) 3/8" flat washers
- (22) 3/8" hex nuts

Assembly:

1. All chain fastenings should be done by:
 - place a flat washer on the bolt
 - place the 2 chain links on the bolt
 - place another flat washer on top
 - tighten the first nut down firmly
 - tighten a second nut down hard, jamming the two nuts together.
2. Cross the two 7' chains so that they cross at 3', leaving a 4' tail. (The drawing shows 6' pieces, oops!) Fasten the crossed chains, making an 'X'.
3. The inner net 'ring' should have 12" long sections fastened to the cross chains 8.5" from the center. It is made from the 4' piece of chain. Don't overlap the ends, just fasten them on adjoining links.
4. The outer net 'ring' should have 24" long sections fastened to the cross chains 17" from the center. Don't overlap the ends, just fasten them on adjoining links.
5. Attach the 2 grab hooks, via their clevis, to the 3' (shorter) ends of the two cross chains.

