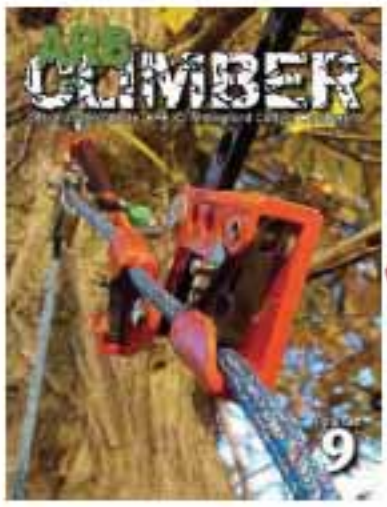
ON THE COVER



Our slightly abstract photo cover this issue features the CMI Rope Jack that we reviewed in the last issue. This fantastic adjunct enables you to initiate hauling of lighter loads up to about 300kg/6600 lb (rope-dependant) from any point along your rope length as long as you can anchor it to something. The anchor can be as remote as you like providing you minimise stretch, but given your job there's probably a tree handy? It costs around $265/€200 and operates on rope diameters from 9mm(3/8") to 16mm (5/8").

After our comprehensive review in issue 8 we had an interesting conversation with a colleague in the UK who had created a prototype of a very similar product for an inventor who had also bolted two hand ascenders to a bar. This was sold or at least available to buy for a while via a rope access company but I'm not sure they quite grasped the full potential or indeed the best way to deploy it. The grainy shot below shows an option where the device isn't anchored at all and instead does the grunt work in a hauling system using the rope either side of a capture device. Worth a try I suppose but the Rope Jack cams are set a little too close to be able to connect easily to the two ropes and gain much distance whereas the version in this photo can gain several inches more per stroke but it's still a rather ineffectual way of doing things. In this particular instance, a mini pulley system in a bag might be easier to carry for a casualty pick off rescue where you only need to de-weight the rope a few inches and transfer the casualty over to your harness or a lowering system. The beauty of the RopeJack in its CMI-manufactured mode is that it can replace an entire pulley system or even a winch on smaller loads. The Rope Jack won't be as effective as a winch in taking in miles of rope – it's 5:1 so you'll look like a manic woodpecker cranking on that handle – but over shorter distances it excels. You can use it to take up tension on leaners, lift light branches for cabling, tension zip-lines and to apply directional load for felling where you only need a few feet of movement. Remember the load limit is effectively set by the teeth of the cam in these Ultrascender frames and that means you can't load it beyond about half a metric tonne but this figure will vary wildly depending on the type of rope and the diameter of rope you use. Err on the cautious side but you will get a good feel for what it can cope with without damaging your rope especially if you do as we suggested in the review and use it in conjunction with a load cell to give you an idea of the forces involved in various actions and types of tree. The handle itself is a kind of fail-safe because it's designed to break or bend if overloaded – hopefully that should kick in long before you overload the cams to levels likely to sever the rope. That means there should never ever be an occasion when you try to artificially overload the system by increasing leverage or hang all your weight on the handle – if you can't do it with one hand, don't do it! You can buy replacement handles from **www.cmi-gear.com**. Something else we suggested was to pre-rig the RopeJack with a simple load release hitch like a mariners between the RopeJack eye and your anchor, that way, if something gets jammed you can still release tension. Otherwise the release method is to jiggle the handle until you see the rear cam come loose then do the same with the front – you'll get the hang of it but if you struggle you'll have that release hitch won't you?

Some of the same things we've discussed in this issue's review of the RPM mini-pulley systems could equally be applied to the RopeJack – what you lose in continual pumping for relatively short gains, you make up for in set-up time and in the time saved not having to reset a pulley system. If the handle didn't need to be so large from a leverage perspective it could almost be called a 'mini pulley system' since it gives around a 5:1 mechanical advantage. Perhaps the next incarnation of the RopeJack could employ some kind of telescopic handle? CMI now make this useful carry-bag for the RopeJack costing about $28 and with a webbing carabiner eye at the top.