

Horseshoe Quarry re-bolting project

A significant section of Horseshoe Quarry (but not all of it) is owned by the BMC. This is managed on behalf of climbers and walkers by the Land Management Group (LMG) to provide recreational access to the crags and surrounding land, as well as improving the conservation value of the site.

Currently there is a wide variety of fixed equipment on the crag of mixed vintage, spacing and quality. The LMG would like to carry out a large scale project to replace this with new, high quality and long lasting bolts across BMC land at Horseshoe. This briefing note aims to give more information about the LMG's proposals and invite comments from the local area.

Firstly some background...

The LMG has responsibility for managing all BMC owned crags and some others where access is allowed on condition the BMC accepts management responsibility. Management arrangements are site specific and wide ranging, but in every case there will be consideration of health and safety issues which is not about taming the wild but about warning of, or addressing dangers which may not be apparent or anticipated.

The LMG was created because the BMC recognised that landowners have a duty to visitors under the law of occupier's liability. Whilst the duty of care is to take **reasonable** measures to protect visitors from harm, what is considered reasonable may differ between a farmer who grazes sheep on land adjacent to a crag and an organisation that owns land for the purpose of facilitating climbing there.

It is also the case that the duty of care might extend to fixed equipment on a crag, particularly for an organisation considered to be an 'expert' regarding fixed equipment for recreational climbing. The BMC is not aware that this point has been tested in court but the law is constantly developing and the possibility cannot be excluded. Similar concerns led to the formation of a Bolts Working Group some years ago which published guidance on design and selection of materials and on the installation and use of fixed equipment. Again the BMC is not aware that a failure of fixed equipment has resulted in a successful claim, but the possibility cannot be ruled out.

Why is work needed at Horseshoe?

This venue is of particular importance because of its popularity arising from the quality of many climbs, its accessibility and the fact that a large proportion of the routes are of an easier standard than many sport climbing venues in the Peak District. Those factors also result in it being used by many making the transition from indoor walls to climbing outside. These are the very people who are least equipped to recognise and address risks that are not obvious.

The current fixed gear in place at Horseshoe is widely variable in quality and age, is to an extent an unknown quantity and testing it is practically difficult. By installing new bolts, we will be confident of their quality whilst also enabling us to make climbing at Horseshoe a more pleasant experience for everyone.

The LMG have prepared a specification for re-equipping the crag included below as an appendix. This is based on feedback from Horseshoe users and observations from BMC staff and volunteers over several years, put together by a small working group familiar with the venue. It is by no means a final version - changes can be made following constructive feedback if required. Before proceeding with this proposal, we want to consult with local climbers through the Peak Area meeting for any feedback on the proposals. There is no intention to carry out similar projects elsewhere.

What now?

The specification has been used to obtain quotes through a tender process with three local rope access companies run by experienced climbers to undertake the work.

If feedback from this consultation at the area meeting is positive, following any changes needed to the specification, we hope to begin work this summer (2017) using the successful company to carry out the work quickly and to a high standard.

Whilst the work is being carried out, sections of the crag would be temporarily closed for safety reasons. This would only apply to the part of the crag being worked on at that time and would take place during the week, avoiding evenings to minimise the impact on visitors.

We also hope to run a crowdfunding campaign alongside this to help raise funds for the work and engage with the climbing community.

Please come along to the Peak Area meeting on Wednesday 7th June 2017 at the Maynard Arms, Grindleford to get involved with the discussion, or if you can't attend but would still like to make your voice heard, send an email to Becky Hammond (Peak Area Secretary) at: becky@bmcvolunteers.org.uk.

Appendix 1: Horseshoe Re-Equipping Project Specification

Objective

To make the BMC owned section of crag at Horseshoe Quarry as safe and amenable a place to climb as is reasonably possible. The work should benefit all experience levels - from those making their first trip outside to experienced sport climbers.

Scope of work

- Work to only take place on routes within the boundaries of BMC owned land.
- Replace all existing bolts on BMC owned land with new, high quality bolts which provide high safety standards as well as excellent longevity.
- Additional bolts may be required on some routes where bolts are currently spaced too far apart.
- The spacing of new bolts should not require the use of a clipstick to protect from a ground or ledge fall.
- Standardisation of lower offs across routes on BMC land to simplify the process of descending from a climb.
- Only existing sport routes to be worked on – trad routes should be left in their unbolted state.

Methodology

Bolt placement

- Old bolts to be removed neatly, leaving no sharp studs. Bolts to be tapped back into the rock where possible and holes filled with resin and limestone dust mix.
- New bolts to be spaced to fit with the objective above. The Climbing Wall Standard provides a guideline for spacing:

Bolt 1: 3.1m max
 Bolt 2: 1m higher than bolt 1
 Bolt 3: 1m higher than bolt 2
 Bolt 4: 1.5m higher than bolt 3
 Bolt 5: 1.7m higher than bolt 4
 Bolt 6: 2m higher than bolt 5
 Subsequent bolts at 2m spacing

- The above spacing should be used as a guideline and is the ideal spacing if possible. It is understood that other factors such as rock quality/availability of holds etc may mean that the guideline distances cannot be followed exactly.
- All bolts should be clip able from usable holds by persons of average height and positioned to prevent ground falls or impact with ledges.
- The eye of each new bolt should be recessed into the rock to prevent flex and rotation.

Type of bolts

- A wide range of types of bolt are currently in situ on routes in Horseshoe quarry including various types of expansion and resin bolts. Contractors should be prepared to adapt their removal methods depending on the type of each individual bolt.
- Replacement with Bolt Products stainless 100mm long resin bolts (requiring a 17/18mm hole)
- Lower offs to be constructed from two 100mm long Bolt Products bolts, with a stainless maillon and ring on each bolt.
- Bolts, maillons, rings and resin tubes to be provided by the BMC.

Loose rock

- It is foreseeable that some routes could involve significant amounts of unstable rock at a 'macro' scale (ie structurally unstable rather than just loose individual holds).
- If loose rock is identified and can be cleared to leave a stable face, then scaling should take place, followed by replacement of bolts.
- If loose rock which creates structural instability (ie potential collapse of large blocks or the whole route, or sections where bolts are unable to be safely placed) cannot be scaled, the route should have the existing bolts removed and not replaced.

Timing and order of work

- This work is a high priority for the BMC and will ideally begin as soon as possible.
- Work to take place on weekdays to avoid high visitor numbers.
- Discreet sections of crag within each phase of work to be 'closed' (roped off or similar) and worked on allowing access to the remaining areas of the quarry
- Work to take place in phases, in the following order of priority (routes covered do not include trad routes which should not be worked on):

Area of work:	Routes covered:	Route length:	No of routes:
The Toilet Sector	<i>The Sewer to Easy Come, Easy Go</i>	8-11m	21
Left Hand Walls	<i>Mr Cellulite's Arete to Sag Paneer</i>	11-18m	24
Main Wall (left side)	<i>Pale Rider to Winter Fingers</i>	15-18m	25
Main Wall (right side)	<i>Broken to Bits to Passage of Time</i>	12-18m	29
Upper Tier (right side)	<i>Labour Relations to Hornby</i>	9-16m	25
Upper Tier (left side)	<i>In the Jailhouse to A Liberal Smear</i>	9-12m	24
Remaining areas (parts of Upper Bay, Gouranga Bay and crags off the ramp to be covered in later work)			