

Carn Liath and Creag an Dail Bheag

Report of survey carried out by Alan Dawson on 26 September 2013

1. Introduction

Carn Liath and Creag an Dail Bheag are a pair of hills on the Invercauld estate in the southern Cairngorms, south of Ben Avon. They are usually approached from the south, by a very good track from Keiloch, just off the A93 road 4km east of Braemar. Both hills are shown as 862m high on Ordnance Survey maps at 1:50000, 1:25000 and 1:10000 scales, although the 1:250000 map shows Creag an Dail Bheag as 863m. The Scottish Mountaineering Club (SMC) currently lists Carn Liath as a Corbett with no mention of Creag an Dail Bheag, although in the SMC Corbett's guidebook, Bill Brooker writes "...the two highest are both shown as 862m and lie 1km apart but only count as one Corbett. An hour is sufficient time to visit the other tops (recommended for the prudent hillwalker)". He appears to use the name Carn Liath as though it applied to both summits, perhaps because the name Creag an Dail Bheag strictly refers to the crags further west, opposite Creag an Dail Mhor. However, the name Creag an Dail Bheag is commonly used to refer to the summit as well as the crags, just as Creag an Dail Mhor refers to the Munro Top as well as the crags to its east. Carn Liath and Creag an Dail Bheag have been listed as twin Marilyns for many years, although Carn Liath was given primary status as it is the one listed in the Relative Hills of Britain book, in accordance with the Corbett's listing at the time. This had been changed in 1990, when Carn Liath replaced Creag an Dail Bheag as the official Corbett in Munro's Tables, though the reason for this change is unclear.

The primary purpose of the survey was to measure both Carn Liath and Creag an Dail Bheag in order to determine which is the higher summit. The secondary purpose was to establish the precise location of the highest point of each summit, and a further purpose was to measure the drop between the two summits, in order to confirm that both summits have a drop all round of over 30m, thereby qualifying as Corbett Tops and Sims (Six-hundred Metre Summits).

Heights were measured using a Leica Geosystems RX 1250 GPS antenna and controller, with subsequent processing by John Barnard of GJ Surveys, using OS Rinex data to obtain precise measurements. Conditions for the survey were fine: dry, cloudy, cool and breezy, with good visibility between the summits all day.

2. Carn Liath summit survey

Carn Liath has a large flat summit area at or above 860m, with several cairns and several possible summit locations. An Abney level was used extensively to determine which of the many candidates was the highest point. Numerous brief GPS surveys were also carried out. These were not long enough to produce precise height data for the alternative summits but were useful in supporting the conclusion reached from use of the Abney level. After well over an hour of sightings and mini-surveys, the highest point was identified as a long low rock a few metres to the east of a small cairn, near the south-west of the 860m contour shown on large-scale OS maps. As the rock was uneven and steep sided, it was difficult to obtain a firm and stable position for a tripod. The GPS antenna was therefore supported in a stable horizontal position directly on top of the highest part of the rock and left there for one hour. Result:

Summit rock: 60 minutes at NO 16488 97623, height 861.5m

3. Col survey

The col between Carn Liath and Creag an Dail Bheag has an 828m spot height shown on the large-scale OS map, indicating a drop of 34m between the two summits. A short survey was carried out at the col to clarify and confirm this, in case the 828m point was not at the optimum col position. The col area turned out to be flat, with small stones and short heather and scrub. It was relatively easy to locate the most suitable survey point and set up the GPS antenna on a tripod, 85cm above the ground. Result:

Col: 30 minutes at NO 16175 97722, height 828.35m \pm 0.05m

The col was therefore measured to be 33.15m lower than the summit of Carn Liath.

4. Creag an Dail Bheag summit survey

Like Carn Liath, Creag an Dail Bheag has an extensive flat summit area. OS maps show two separate 860m contour rings, with an 862m spot height in the western ring. There is also an 858m spot height shown near the south-east edge of the large 850m contour. However, Creag an Dail Bheag was a much more straightforward summit to survey than Carn Liath, as there were only three possible highpoints: a cairn at or near the 858m spot height, a prominent rock at the location of the 862m spot height, and a rounded but noticeable rise at the eastern 860m contour ring. Sightings with an Abney level were sufficiently conclusive to eliminate the two alternative summits fairly quickly, as it was apparent that the highest point was the prominent rock in the western 860m contour ring, corresponding precisely with the 862m spot height shown on OS maps. A small cairn on top of this rock was dismantled (and later rebuilt) in order to reveal the highest part of the embedded rock, and to provide a firm flat base for the survey. The tripod was set up on this rock at a fairly low height in the strengthening wind, and was measured to be 49cm above the highest part of the rock (to the base of the antenna).

A change of battery was required shortly before the hour of data recording had been completed. The antenna was therefore left in position for 85 minutes to compensate for the brief interruption. Result:

Summit rock: 85 minutes at NO 15732 98159, height 863.0m

The results show the summit of Creag an Dail Bheag to be 1.5m higher than the highest point on Carn Liath. Creag an Dail Bheag therefore replaces Carn Liath as a Marilyn, and potentially as a Corbett if the findings are accepted by the Scottish Mountaineering Club.

5. Summary and conclusions

Hill name:	Carn Liath, section 8B
Summit:	861.5m at NO 16488 97623
Drop:	33.15m
Hill name:	Creag an Dail Bheag, section 8B
Summit:	863.0m at NO 15732 98159
Drop:	211m
Outcome:	Creag an Dail Bheag replaces Carn Liath as a Marilyn. Both hills remain Sims.



Survey point on the summit rock of Carn Liath



Creag an Dail Bheag summit plateau



Survey point on Creag an Dail Bheag summit, looking north toward the Ben Avon plateau