The Mountaineering Council of Scotland

Wind farms and mountaineering in Scotland

July 2016

Introduction

Mountain recreation is a significant tourism market in Scotland. Walking tourism was estimated to bring in £627m to the Scottish economy in 2008 – more than all other nature-based tourism combined – and 15% of all tourism spend.[1] Hill-walkers are likely to be particularly sensitive consumers of landscape. They are therefore a potential 'canary' in terms of identifying possible tourism impacts from wind farms.

There is very little up-to-date evidence on the impact of wind farms on tourist behaviour. Developers and the Scottish Government rely heavily upon a single study conducted in 2007, when operational onshore wind generation capacity was only one fifth what it was at the end of 2015.

In 2013-14, the Mountaineering Council of Scotland (MCofS) surveyed mountaineers (mostly hill-walkers) to assess whether the increasing number of wind farms was likely to affect their future behaviour.[2] Respondents anticipated a high level of discouragement from walking in areas with wind farms. One question in this survey received some criticism for not having an option that wind farms would *encourage* more visits to the hills.

In spring 2016, the opportunity was taken to revisit mountaineers' views on wind farms in mountain landscapes and the impact on their hill-going walking behaviour as part of a general survey of the MCofS membership. As well as addressing previous criticism, a significant change was made by switching the question wording from *expected* change in future behaviour to *actual* current behaviour.

Key points

- The 2016 results show very substantial member support for the MCofS policy of selectively opposing wind farms likely to have a significantly adverse effect upon mountaineering interests.
- Respondents who are encouraged by wind farms (2%) – the omitted option previously – were substantially outnumbered by those who avoid areas with wind farms or go less often (23%).
- Most mountaineers (75%) have not currently changed their behaviour in response to wind farms, though more than half of these prefer not to see wind farms on the hills (44%).
- The two surveys suggest very different levels of avoidance (by various means) of wind farms: in 2013-14 there was 56% expected avoidance and in 2016 there was 23% actual avoidance.
- Various factors may contribute to this, with the main ones likely to be (a) the change in question wording from *expected future* behaviour to *actual current* behaviour and (b) the current reality of a fairly slow increase in visibility of wind farms in mountain areas in the past two years because of the very slow roll-out of consented wind farms and some (but not all) of the most damaging proposals having failed to gain planning permission.
- Within the two surveys we have a pessimistic scenario (2013-14) and a more optimistic scenario (2016). These may give rough limits to the possible impact of wind farms upon mountaineering behaviour.

Between a quarter and a half of mountaineers may go elsewhere if wind farms are built in inappropriate places. One quarter already are doing so. How much future displacement there is will depend upon how well Scotland's mountains are protected by the planning system.

2016 survey method

The 2016 online survey was publicised only to MCofS members. Analysis was undertaken in Microsoft Excel on a data extract downloaded on 15 April 2016. The total number of respondents in this data set was 1541, approximately 12% of members. Tables in this report may not sum to 100% due to individual rounding.

Key results from 2013-14 survey[3]

In winter 2013-14, the MCofS undertook a survey to explore if the growing number of wind farms and their increasing reach into mountainous areas was having an impact upon mountaineering activity, and whether the MCofS position on the areas of Scotland that should be protected from development properly reflected the collective view of its members.

The 970 respondents included MCofS members (640), British Mountaineering Council members (106) and 224 not declaring an affiliation. Although the survey was publicised to only MCofS and BMC members, it could have been hijacked by non-members seeking to skew its results. However, careful analysis showed no evidence of this, with the three subgroups having broadly similar response patterns.

There was strong support for the MCofS position on wind farms, which was – and remains – to oppose those likely to have a serious adverse impact on Scotland's mountains. There was a strong view that wind farms were having an adverse effect upon Scotland's mountain landscapes.

A key question in the survey asked respondents how they thought that the increasing number of wind farms in Scotland was likely to affect their future mountaineering plans.

- A majority (56%) thought that their behaviour would change in future. Most would avoid areas of Scotland with wind farms (40%). The other 16% would travel more outside Scotland or make fewer hill visits.
- Some didn't expect to change their behaviour but thought their enjoyment may diminish (15%).
- Only just over one quarter (28%) felt there would be no effect on their future behaviour.

To set these results in context, published surveys of the general population/tourists were analysed. This showed a variable low rate of discouragement (under 10%) in numerous surveys (of variable quality) undertaken prior to 2008. The major Scottish survey still relied on by the Scottish Government, even now in 2016, with fieldwork undertaken in 2007, showed only 2% discouraged.

Since 2008 only two large general population surveys had been reported: VisitScotland in 2011 showed a 17% discouragement rate and Scottish Renewables in 2013 showed a 26% discouragement rate. The MCofS suggested that this might indicate a growing rate of discouragement, possibly rising as wind farms became more and more visible. Onshore wind generation capacity had more than trebled between 2007 and 2012.

The importance of landscape protection to MCofS members

MCofS members are passionate about Scotland's mountains and hills and they explore these landscapes on a regular basis. This close connection with the mountain landscape explains why support for campaign activity to protect it from insensitive development was the single most important reason selected, from 14 options, for being a member of the organisation in 2016.

Regular hill goers

Hill walking is the predominant mountain activity undertaken by MCofS member survey respondents in 2016. 81% went hill-walking at least monthly, 47% at least fortnightly and 17% at least weekly (base n = 1514).

Campaigning priority

Q. How important are the following to your reasons for being an MCofS member?			
		Number	% of responses
... Support for campaign activity to protect mountain landscapes	High importance	812	59
	Medium importance	409	30
	Low importance	104	8
	No importance	42	3
	Total valid responses	**1367**	**100**

Members were given a list of nine MCofS campaign activities/areas of work, one of which was its work on wind farms. Nearly 90% of respondents wanted to see the same (57%) or more (30%) campaign activity on protecting mountain landscapes from insensitively-sited wind farms. Only 7% wanted to see less effort put into this area.

Q. What is your view of MCofS priority campaign activity and areas of work?			
		Number	% of responses
… Protecting mountain landscapes from insensitively-sited wind farms	Do more	438	30
	Continue as you are	820	57
	Do less	105	7
	I do not know the MCofS position	78	5
	Total valid responses	**1441**	**100**

Most respondents were aware of the MCofS position on wind farms. Some members appear confused despite MCofS communicating through a range of channels. Respondents' personal views, while mostly aligned with the MCofS position of selective opposition, showed some divergence towards more fixed views: more were personally opposed to all wind farms and more were not opposed at all.

Q. What do you understand to be the MCofS position on renewable energy and what your personal opinion?				
	Number		% of responses	
	MCofS	Personal	MCofS	Personal
Opposed to all renewable energy	29	24	2	2
Opposed to all wind farms	71	143	5	10
Opposed to some wind farms with a visual impact on mountains	1172	1059	81	72
Not opposed at all	27	208	2	14
Not sure	150	45	10	3
Total responses	**1449**	**1479**	**100**	**100**

Behaviour change in response to wind farms

Almost a quarter of respondents currently avoid hill walking in areas with wind farms and the sight of a wind farm in a mountain view reduces the enjoyment of two-thirds of members. Just 2% were attracted by wind farms. Comparing the 2016 survey with the 2013-14 survey, there is however a substantial difference between the expected (2013-14) and actual (2016) degree of behaviour change.

Only 2% of respondents to the 2016 survey were encouraged to visit mountains more often by the presence of wind farms. The very small proportion of respondents attracted by wind farms can be set against the 23% who are currently either avoiding areas with wind farms (22%) or going to the hills less often (1%).[4]

The 2016 survey shows much the same level of impact on enjoyment – wind farms diminish enjoyment for 67% of respondents compared with 72% in 2013-14, but less of an impact on behaviour – 23% avoid wind farms/walk less compared with 56% in 2013-14.

Although there was an inadvertent bias in the 2013-14 survey, in that no positive response option was included in the question on expected behaviour change, the new results show that this was of almost no practical significance. The combined 33% in 2016 for 'encouraged' and 'no impact' can be compared against the previous survey's 28% 'no impact'. Although these proportions are narrowly statistically significantly different[5], it is safer to conclude that they are broadly similar given the other differences between the questions in the two surveys.

Q. Does the increasing number of wind farms in Scotland's mountain landscapes affect your plans for walking and climbing?

Membership issues survey 2016			Wind farms and behaviour survey 2013-14		
	N	%	%	N	
It encourages me to go more often, I like to see wind farms when in the mountains	25	**2**	**28**	273	It won't have any impact on my plans and I will still enjoy the mountains
It has no impact	450	**31**			
It does not affect my plans, but I prefer not to see wind farms when in the mountains	632	**44**	**15**	150	It won't affect my plans, but I don't expect to gain the same level of enjoyment.
I go to the mountains just as often, but avoid areas with wind farms	320	**22**	**40**	388	I will go to the mountains just as often, but will avoid areas with wind farms.
			9	90	I will still go to the Scottish mountains, but will take more trips to mountains outwith Scotland.
I go to the mountains less often	12	**1**	**4**	36	I will still go to the mountains, but not as often as I would have.
			3	29	I will stop visiting the Scottish mountains
Total responses	**1439**	**100**	**100**	**966**	

Why are there differences between the surveys?

There are some substantial differences between the 2013-14 and 2016 surveys in the behaviour change expected and actual behaviour. There are several possible explanations.

1. Different samples:

The 2016 survey was a general membership survey and had a higher response rate. It could have obtained a more representative sample of members than the 2013-14 survey which was specifically about wind farms and behaviour.

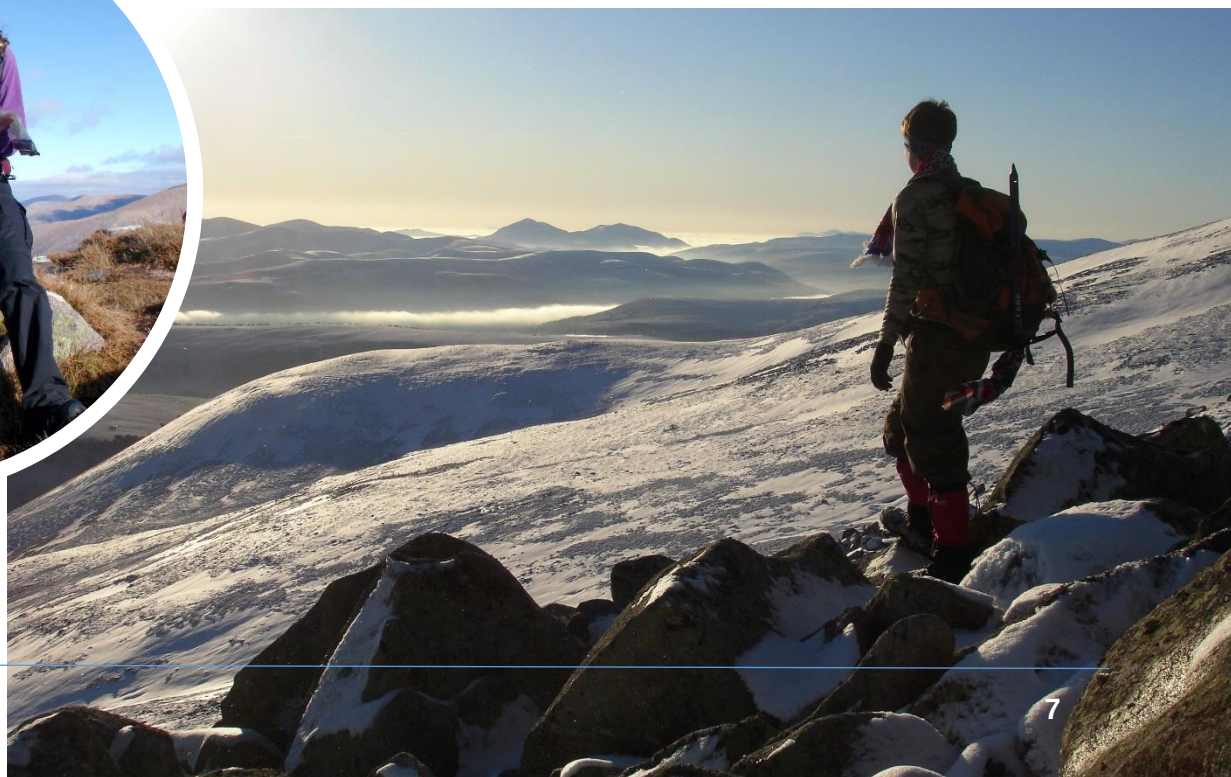
2. Question wording:

One might expect variations in wording to account for a few percentage points difference between surveys, but not a difference of the magnitude seen here. However, the 2013-14 survey was phrased in terms of *future* reaction to wind farms whereas the 2016 survey was phrased in the *present* tense. It may be that many people currently feel they need to make no (or trivial) adjustments to their behaviour while in 2013-14 many were anticipating a future greater degree of adjustment being necessary.

3. Change in response / impact due to limited visibility:

The MCofS has had a fair degree of success in selectively opposing the most damaging wind farm proposals, with several near to National Parks and in or near to mountainous Wild Land Areas being refused planning permission or withdrawn. Across much of Scotland north of the Highland Boundary Fault – though less so in the Southern Uplands – it is possible to have a weekend on the hills without experiencing close views of turbines.

The current level of wind farm visibility from the most popular mountain areas may thus be regarded by many hill-walkers as not ideal but tolerable (perhaps an acceptable trade-off to reduce CO_2 emissions) and not at a level that would trigger a stronger reaction such as avoidance.



4. Change in response due to greater acceptance of wind farms in the uplands:

This cannot be excluded as a reason, but it sits oddly alongside other responses in the member survey where:

- 72% were personally 'opposed to some wind farms with a visual impact on mountains'
- 89% regarded 'support for campaign activity to protect mountain landscapes' as an important reason for membership
- 87% wanted the same or increased MCofS action on 'protecting mountain landscapes from insensitively-sited wind farms'.

There is seldom a single reason why results differ between surveys. In this case, it seems plausible that the 2013-14 survey attracted more respondents with a heightened level of concern about the speed and location of wind farm construction in and around Scotland's mountains. They anticipated a future level of behaviour change that, so far, most mountaineers have not found necessary.

The current reality is that the roll-out of consented wind farms has been very slow and some (by no means all) of the most-damaging proposals have failed to gain planning permission. A broader-based sample of mountaineers in 2016, with their worst fears not realised, are less affected in their current behaviour than had been anticipated by respondents in 2013-14. This picture may change again in the future since many consented schemes have yet to be built and highly intrusive small and large schemes continue to be proposed.

Other recent surveys

In terms of the broader context, no further surveys of general population/tourist discouragement have been carried out since the 2014 analysis in the first MCofS survey report. When Scottish Renewables repeated its 2013 survey in 2015, it did not include this question. VisitScotland is undertaking a two year survey of visitors and the 2015 'Year One' report does not refer to any question on wind farms.[6]

It is almost as if those with the financial resources to commission general population/tourist surveys would prefer not to ask the question in case the answer is unpalatable.

Conclusion

There is strong support from the 2016 membership survey respondents for the MCofS continuing its (partially successful) selective campaigning against wind farms damaging to mountain landscapes. Members are clearly neither complacent about the future nor accepting of more wind farms in the mountains.

Most respondents (75%) have not changed their behaviour, but the majority of these nonetheless prefer not to see wind farms on the hills (44%). Previous expectations of behaviour change might have been shaped by the rapid build of wind farms in the preceding years and the large number of damaging proposals then in the public domain.

Current behaviour is shaped by the, often modest, current level of visibility of wind farms from mountain areas. Even so, more than 10 times as many respondents avoid areas with wind farms as are attracted to them (23% : 2%).

Between the two MCofS surveys, one looking at expectations and the other at actual behaviour change, we may have a pessimistic scenario (2013-14) if more wind farms are built in the mountains and an optimistic scenario (2016) if the position was to stabilise at the current level of visibility. In practice, the latter scenario is very unlikely because mountain-damaging windfarms are already consented and under or awaiting construction.

The two surveys/scenarios may give rough limits to the possible impact of wind farms upon mountaineering behaviour. If so this suggests that between a quarter and a half of mountaineers may go elsewhere if wind farms are built in insensitive places. One quarter already are doing so. How much future displacement there is will depend upon how well Scotland's mountains are protected by the planning system.

Analysis and commentary prepared by:

Dr David Gordon, MCofS Director of Landscape and Planning, July 2016

Find out more or contact us at:

Mountaineering Council of Scotland
The Granary, West Mill Road
Perth PH2 0ED
01738 493942 info@mcofs.org.uk
www.mcofs.orrg.ik

The Mountaineering Council of Scotland

THE MOUNTAINEERING COUNCIL OF SCOTLAND
STREAP ALBA

Notes

[1] Scottish Natural Heritage. *Valuing nature-based tourism in Scotland.* 2010. www.snh.gov.uk/docs/B720765.pdf

[2] MCofS. *Wind farms and changing mountaineering behaviour in Scotland*. 2014. www.mcofs.org.uk/assets/pdfs/mcofs-wind-farm-survey-report_2014.pdf

[3] Full data and references can be found in the report cited above.

[4] 95% confidence intervals are: 1.1-2.4% encouraged; 0.4-1.3% discouraged; 20.1-24.4% displaced.

[5] 95% confidence intervals for the 2016 survey are around ± 2% and for 2013-14 around ± 3% on proportions of 20-80%. For this specific comparison the 95% confidence interval of difference between proportions is 1 to 8 %; i.e. not including 0 and therefore statistically significant. Calculated using http://epitools.ausvet.com.au/content.php?page=z-test-2

[6] www.visitscotland.org/research_and_statistics/visitor_research/all_markets/scotland_visitor_survey.aspx