THE FARM PRACTICES SURVEY 2009
UPLANDS AND OTHER LESS
FAVoured AREAS (LFAS) SURVEY
REPORT

Defra Agricultural Change and Environment Observatory
October 2009
THE FARM PRACTICES SURVEY 2009 – UPLANDS AND OTHER LESS FAVOURED AREAS (LFAS) SURVEY REPORT

Defra Agricultural Change and Environment Observatory Research Report No. 16

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Summary

The uplands are nationally and internationally important areas for biodiversity as well as being of significant landscape, archaeological, recreational, heritage, and natural resource value. They also play a key role in climate change mitigation and adaptation. Agricultural activity has largely shaped the upland landscape, predominantly through sheep and cattle grazing. However, these are areas where the natural characteristics such as geology, altitude and climate make it more difficult for farmers to compete. Upland farms operate on the margins of financial viability with income from the Single Payment Scheme, agri-environment payments and diversified activities often subsidising the farm business.

Farming in the uplands has been increasingly ‘in the spotlight’ in terms of media and political interest due to perceived dangers of destocking and abandonment. This survey of upland farmers was commissioned in order to obtain a better understanding of the attitudes and intentions of upland farmers.

The key findings are:

Economics of the farm business

- The farm business forms less than half of household income on 49% (±3%) of upland farms. The larger the farm, the greater its contribution.

- 56% (±3%) of upland farms have a diversified activity or other income contributing to household income. Almost half (48% ±3%) have some form of off-farm diversification or other income (eg second job or contract work). 25% (±3%) of upland farms have an on-farm diversified enterprise such as a farm shop or Bed & Breakfast.

- Approximately half of upland farmers are debt free. However, of those that do borrow, farms that rent in all of their land and part time commercial farms were most likely to report that obtaining external finance was becoming much more difficult.

Agri-environment schemes

- 71% (±3%) of upland farmers currently have land within environmental schemes. 39% (±3%) have Entry Level Stewardship (ELS) agreements (or its organic equivalent), 37% (±3%) have either existing Environmentally Sensitive Area or Countryside Stewardship agreements, 9% (±2%) have Higher Level Stewardship (HLS) agreements and 5% (±1%) have other environmental agreements (e.g. Wildlife Enhancement Scheme)

- Including current agreement holders, 21% (±3%) of farmers would be interested in joining ELS and 29% (±3%) would be interested in joining HLS. Interest is greatest from current ESA or CSS agreement holders (more so for HLS than ELS)

- Of those upland farmers with (or intending to farm) land in the SDA, 48% (±4%) expressed an interest in joining Uplands ELS, covering some 65% (±6%) of land. Interest is greatest in the north of England, particularly in the North Yorkshire Moors and the Yorkshire Dales/ Bowland regions.
Moorland and other grazing

- In the last 4 years, 36% (±5%) of upland farmers have reduced or stopped grazing on moorland. The most common reasons given for change were environmental schemes (64% ±9%) and economics of hill stock (37% ±9%).

- There is little evidence that those that have reduced or stopped grazing moorland have in turn increased their grazing on better quality grassland.

- 86% (±4%) of upland farmers do not intend to make any changes to moorland grazing levels in the next 2 years, 7% (±3%) intend to decrease or stop and 6% (±3%) intend to increase.

The future

- Almost one third of upland farm businesses are expected to continue for at least 20 years. These farms are more likely to have a farmer aged under 55 years, or to have more than 100 ha of LFA land, or to be run on a full time commercial basis, or to be classified as “mainly moorland”, or to have dairy cows, or to be long established family farms or to have succession secured (within the family).

- 21% (±3%) of upland farm businesses are not expected to continue beyond the next five years. These farms are more likely to have a farmer aged 55 years and over, to farm less than 100ha of LFA land, to be mainly rough grazing or other grassland or to have no succession arrangements with the latter appearing to be a key factor for the future of the farm business. Although these farms were also less likely to borrow than those expected to continue beyond the next 10 years they were no more likely to report problems obtaining external finance.

- 37% (±3%) of upland farmers have succession secured. Succession remains uncertain for 36% (±3%), whilst for 27% (±3%) there is no succession. The level of uncertainty declines with the age of the farmer but, for 21% (±5%) of those aged 65 and over, succession still remains uncertain. Around a quarter of those aged 55 and over with no succession had no family to inherit the farm.

- Almost all upland farmers (95%) feel that maintaining the traditional upland way of life is either very important (60% ±3%) or important (35% ±3%).

- 82% (±3%) of upland farmers agree that maintaining the environment is “vital to the future of upland farming” and/or “part of the process of upland farming”. Those least likely to agree with either of these statements, tended to be aged at least 65 years or for whom the farm is a hobby/lifestyle choice.

- The most important challenges for upland farmers were market prices (76% ±3% of upland farmers), changes to Single Payment Scheme payments (65% ±3%), the impact of new regulations (65% ±3%), input costs (59% ±3%) and the level of environmental payments (47% ±3%). Farms classed as “mainly moorland” were much more likely to see the level of environmental payments and the impact of new regulations as challenges than those with better quality grassland.

- Despite these challenges, 41% (±3%) of upland farmers indicated that they “will do all that they can to remain in farming” and 38% (±3%) “will try to remain in farming”. 19% (±3%) plan to retire and just 2% (±1%) are “thinking of leaving farming for another career”. Of those aged 65 or over, less than one third plan to retire, whilst 37% (±6%) plan to do all that they can to remain in farming and 31% (±6%) will try to remain in farming.
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1. Introduction

The uplands are nationally and internationally important areas for biodiversity as well as being of significant landscape, archaeological, recreational, heritage, and natural resource value. They also play a key role in climate change mitigation and adaptation. Agricultural activity has largely shaped the upland landscape, predominantly through sheep and cattle grazing. However, these are areas where the natural characteristics such as geology, altitude and climate make it more difficult for farmers to compete. Upland farms operate on the margins of financial viability with income from the Single Payment Scheme, agri-environment payments and diversified activities often subsidising the farm business.

Farming in the uplands has been increasingly ‘in the spotlight’ in terms of media and political interest due to perceived dangers of destocking and abandonment. A number of statements have been made about the prospects for hill farms largely on the basis of anecdote or small samples and it is important to have reliable data on which to judge their validity. It was therefore decided to run a Farm Practices Survey in 2009 that specifically targeted upland farmers, in order to better determine their attitudes and intentions. The survey form was designed with help from Natural England and National Parks officers.

The survey focussed on five main areas (Figure 1.1), the results from which are dealt with in separate chapters of this report.

Figure 1.1 Summary of main topics covered by 2009 Uplands Survey

2. How the Survey was run

2.1 Survey methodology

The Farm Practices Survey 2009 – Uplands and other Less Favoured Areas (LFAs\(^1\)) survey form was sent to approximately 2,000 farms in March 2009. The survey was completed on a

\(^1\) The LFA includes both Disadvantaged Areas (DA) and Severely Disadvantaged Areas (SDA).
voluntary basis but still achieved a response rate of just over 50%. Thank you to all of the farmers who have completed a survey form.

This survey targeted Single Payment Scheme (SPS) claimants with land within the LFA. In 2008, there were 19,200 farm businesses that claimed the SPS and had at least one parcel of land within the LFA. Thresholds were applied to reduce the survey burden on farmers and to ensure that the form was relevant for those targeted. To be included, businesses had:

1. at least 20 hectares of LFA land and at least a third of their total land area contained within the LFA; or
2. at least 5 hectares of land entirely within the LFA.

Each of the upland regions in England has its own unique characteristics and agricultural practices can vary significantly between regions. To create a robust and efficient sampling regime, businesses were stratified by region and farm size (measured by LFA area). This method ensured good coverage in all upland regions and minimised the burden on smaller farms within our population. For sampling, businesses were classified to 12 regions based on groups of National Character Areas (NCAs)\(^2\). A list of the NCAs assigned to each region is included in Appendix 1. The Disadvantaged Areas of the South West which include parts of the Culm and Cornish Killas NCAs (see Figure 2.1), were considered to be more lowland in character than other parts of the English LFA. Businesses in these areas were therefore not included within the survey.

The results presented in this report reflect the views of the 12,333 businesses that meet the criteria discussed above and for which contact details were available on the farm survey register on 30 January 2009. A regional breakdown of the number of businesses within the population and the sample are shown below (Table 2.1) together with the achieved response rates.

Table 2.1: Sample design and response rates by strata

<table>
<thead>
<tr>
<th>Region / Farm LFA area</th>
<th>Number of eligible holdings in England</th>
<th>Number of holdings sampled</th>
<th>Response rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borders</td>
<td>830</td>
<td>160</td>
<td>58</td>
</tr>
<tr>
<td>North Pennines</td>
<td>1,195</td>
<td>206</td>
<td>49</td>
</tr>
<tr>
<td>Lake District</td>
<td>1,448</td>
<td>248</td>
<td>48</td>
</tr>
<tr>
<td>Cumbrian Coast</td>
<td>233</td>
<td>37</td>
<td>54</td>
</tr>
<tr>
<td>North Yorkshire Moors</td>
<td>518</td>
<td>163</td>
<td>59</td>
</tr>
<tr>
<td>Yorkshire Dales</td>
<td>1,238</td>
<td>223</td>
<td>59</td>
</tr>
<tr>
<td>Bowland</td>
<td>644</td>
<td>111</td>
<td>56</td>
</tr>
<tr>
<td>Peak District</td>
<td>2,519</td>
<td>325</td>
<td>42</td>
</tr>
<tr>
<td>South Pennines</td>
<td>1,438</td>
<td>203</td>
<td>44</td>
</tr>
<tr>
<td>Welsh Borders</td>
<td>927</td>
<td>143</td>
<td>49</td>
</tr>
<tr>
<td>Dartmoor / Bodmin Moor</td>
<td>681</td>
<td>103</td>
<td>46</td>
</tr>
<tr>
<td>Exmoor</td>
<td>662</td>
<td>105</td>
<td>45</td>
</tr>
<tr>
<td>All farms</td>
<td>12,333</td>
<td>2,027</td>
<td>50%</td>
</tr>
</tbody>
</table>

\(^2\) England has been divided into 159 NCAs (previously known as Joint Character Areas or JCAs) based on their physiogeographic, land use, historical and cultural attributes. At least 60 NCAs have some land within the LFA. For more details on NCAs see [http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx](http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx).
2.2 Potential bias

The results from this survey, like any other, will contain a degree of uncertainty due to two principal factors. Firstly, we are obtaining results from a sample rather than the entire population. This induces error, but the sample has been designed (Section 2.1) to minimise the impact of not using the full population of farms. In addition, where appropriate we try to give an indication of the sampling error by quoting 95% confidence intervals\(^3\) in the text and displaying these confidence intervals within the charts. Secondly, in any survey there may be a bias in the results due to respondents differing to non-respondents, misunderstanding the questions or being reluctant to admit to some activities on an official form. For example, it is well known that public opinion polls in Britain have sometimes produced erroneous results because respondents have been unwilling to admit that they intended to vote for a particular party. In this survey there is clearly a risk that responders to the survey may be more conscientious farmers. We have tried to minimise this by reassuring respondents that information is treated as confidential, but it is unlikely that these measures will have been totally successful. Aside from any bias in responses, farming is a business where, due to the vagaries of the weather and other factors outside the farmer’s control, there may be a genuine gap between what farmers intend to do and what is actually achieved.

These potential biases mean that the results described here (and those from most similar surveys) must be interpreted with caution. Nevertheless they contain useful information on farmers’ attitudes and intentions.

2.3 Survey analysis

Results have been analysed using a standard methodology for stratified random surveys to produce national estimates. With this method, all of the data is weighted according to the inverse sampling fraction.

One complication is that not all respondents complete all sections. Sometimes this is for a good reason (i.e. the section does not apply to them), but sometimes it is not clear why it has been left blank. Where possible, we try to design the form to minimise this type of confusion and on occasions we will phone farmers to clarify responses. Despite these measures some interpretation is necessary to interpret blank responses, in order to decide whether they are genuine missing values or implicit negative responses.

This document is designed to provide a commentary of the results and a brief explanation of their importance. Tabulations of the results by region, area of land within the LFA and LFA status\(^4\) can be found in the detailed Statistical Notice\(^5\).

In order to produce regional results, adjacent sampled regions have been grouped to give the following 8 reporting regions: North Pennines and the Borders, Lake District, Yorkshire Dales and Bowland, North Yorkshire Moors, South Pennines, Peak District, Welsh Borders and the SW Moors (Figure 2.1).

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\(^3\) Range shown for each estimate is the 95% confidence interval based on the standard error multiplied by 1.96. This means that we are 95% certain that the true value lies within the range shown.

\(^4\) The LFA status distinguishes between farms that have land in the DA or SDA only and those with a mixture of the two land types.

For the purposes of this survey grassland has been broken down into the following 3 categories:

1. **Moorland** – open or enclosed moorland areas including both sole occupancy and commons
2. **Enclosed rough grazing** – lower quality grazing land below the moorland line
3. **Other grassland** – improved and semi improved grassland areas that form the better quality grazing land on the farm.

**Figure 2.1: The upland regions**
3. General farm characteristics

As well as attitudes and intentions, the survey collected information on some general characteristics of upland farms to allow a better understanding and interpretation of the survey results.

3.1 Enterprise types

In the uplands, the natural characteristics such as geology, altitude and climate make it more difficult for farmers to compete. Historically, hill farmers have predominantly managed these areas through sheep and cattle grazing. The survey results show that 96% (±2%) of upland farmers had a sheep, beef and/or dairy enterprise.

Approximately three quarters (76% ±3%) of upland farms have sheep and this is the predominant enterprise type in most regions, particularly in the Lake District and Yorkshire Dales/Bowland regions (Figure 3.1). A smaller proportion of farms in the Peak District had sheep than in other upland regions. However, this should not necessarily be interpreted as there being fewer sheep in this region.

63% (±3%) of upland farms were found to have a beef enterprise and 13% (±2%) were found to have a dairy enterprise. The North Pennines/Borders, North Yorkshire Moors and the South West Moors had the smallest proportions of farms with dairy enterprises. More than 90% of farms with dairy enterprises classed themselves as full time commercial farms compared to 66% (±3%) of those with sheep enterprises and 70% (±4%) of those with beef enterprises.

Figure 3.1: Proportion of upland farms with given enterprise type by upland region

3.2 Commercial status

The majority of upland farms (60% ±3%) included within the survey are full time commercial enterprises, and a further 22% (±3%) are run on a semi (or part-time) commercial basis.

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6 Thresholds were applied to reduce the survey burden on farmers and to ensure that the form was relevant for those targeted. To be included, businesses had: at least 20 hectares of LFA land and at least a third of their total land area contained within the LFA; or at least 5 hectares of land entirely within the LFA.

7 Respondents were asked to classify their farm themselves.
The remainder were found to be run either as a hobby or lifestyle choice (10% ±2%) or to let out their land on a short term basis (8% ±2%). Those farming these latter two categories tend to be older than those running more commercial farms (Figure 3.2).

![Figure 3.2: Proportion of upland farmers by age and commercial status](image)

This self classification concurs extremely well with the standard economic farm size classifications based upon standard labour requirements applied to June Survey returns (Table 3.1). Almost all of those farms thought to be at least medium sized (i.e. requiring at least 2 full time equivalent workers) have classed themselves as full time commercial businesses. Those for which the farm is a hobby or lifestyle choice or the land is let out on short term agreements are most likely to be very small farms requiring less than half a full-time equivalent person.

### Table 3.1: Percentage of upland farms by commercial status (self classification) and economic size (calculated using June Survey returns and standard labour requirements)

<table>
<thead>
<tr>
<th>Economic size:</th>
<th>Full time commercial</th>
<th>Part time commercial</th>
<th>Hobby / lifestyle choice</th>
<th>Land let out on short-term agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large</td>
<td>100 ±0</td>
<td>0 ±0</td>
<td>0 ±0</td>
<td>0 ±0</td>
</tr>
<tr>
<td>Large</td>
<td>98 ±2</td>
<td>1 ±1</td>
<td>0 ±1</td>
<td>1 ±2</td>
</tr>
<tr>
<td>Medium</td>
<td>99 ±2</td>
<td>1 ±2</td>
<td>0 ±0</td>
<td>0 ±0</td>
</tr>
<tr>
<td>Small</td>
<td>85 ±5</td>
<td>11 ±4</td>
<td>2 ±2</td>
<td>2 ±2</td>
</tr>
<tr>
<td>Part-time</td>
<td>55 ±8</td>
<td>38 ±8</td>
<td>6 ±4</td>
<td>1 ±2</td>
</tr>
<tr>
<td>Spare-time</td>
<td>21 ±5</td>
<td>36 ±6</td>
<td>24 ±6</td>
<td>19 ±5</td>
</tr>
</tbody>
</table>

Note: Comparison against June 2008 farm level dataset. For June Survey, smaller farms are sampled at a much lower rate than larger farms and hence it may be some years since the last actual response for some spare and part time farms. Estimates are made for non-sampled and non-responding farms.

### 3.3 Type of grassland

The type of grassland is an important classification within the survey, providing an indication of the quality of available grazing. Overall, 27% (±2%) of upland farms included some
Moorland, 54% (±3%) included some rough grazing and 86% (±2%) included some other, better quality, grassland. The variation by region is shown in Figure 3.3. It should be noted that the survey results do not give an indication of the area covered by these categories but simply show the percentage of farms which contain the different grassland types.

Figure 3.3: Proportion of upland farms with moorland, rough grazing and other grassland by region

Moorland (defined by the area above the moorland line) covers more than 40% of the four most northerly upland regions, but less than 10% of the Welsh Borders (Figure 3.4 and Table 3.2). It is not possible to map the extent of rough grazing and other grassland.

Figure 3.4: Area above the moorland line within upland regions
The proportion of upland farms with moorland in the Peak District and North Pennines/Borders appears low compared to the area of moorland. However, an examination of the Single Payment Scheme data suggests that businesses in these regions tended to have larger areas of moorland. The responses for the Lake District and South West Moors suggest that farmers in these regions were either not claiming the Single Payment on all of their moorland or that for the purposes of this survey they may have treated areas that were not above the moorland line as moorland.

Table 3.2: Comparison of survey and SPS data for moorland

<table>
<thead>
<tr>
<th>Upland Region</th>
<th>% by area which is moorland</th>
<th>% of upland farms with moorland from uplands survey</th>
<th>% of upland farms with moorland from 2008 SPS dataset</th>
<th>Average moorland area claimed from 2008 SPS dataset (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Pennines and Borders</td>
<td>40</td>
<td>29</td>
<td>26</td>
<td>243</td>
</tr>
<tr>
<td>Lake District</td>
<td>43</td>
<td>42</td>
<td>26</td>
<td>115</td>
</tr>
<tr>
<td>Yorkshire Dales and Bowland</td>
<td>49</td>
<td>43</td>
<td>35</td>
<td>131</td>
</tr>
<tr>
<td>North Yorkshire Moors</td>
<td>43</td>
<td>32</td>
<td>29</td>
<td>78</td>
</tr>
<tr>
<td>South Pennines</td>
<td>25</td>
<td>21</td>
<td>21</td>
<td>71</td>
</tr>
<tr>
<td>Peak District</td>
<td>22</td>
<td>10</td>
<td>13</td>
<td>133</td>
</tr>
<tr>
<td>Welsh Borders</td>
<td>9</td>
<td>10</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>SW Moors</td>
<td>37</td>
<td>35</td>
<td>18</td>
<td>98</td>
</tr>
</tbody>
</table>

As well as identifying those upland farms that farmed moorland, rough grazing and/or other grassland, respondents were asked to categorise their farm as either “mainly moorland”, “mainly rough grazing” or “mainly other grassland”\(^8\). The results for each region are shown in Figure 3.5.

Figure 3.5: Proportion of upland farms by quality of grassland and upland region

Those farms classed as “mainly moorland” tend to have a greater proportion of farmers aged 55 and over than those with better quality grassland (Figure 3.6). They are also more likely to rent land (whether as a mixture of owned and tenanted land or tenanted only) and classify themselves as full or part time commercial businesses.

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\(^8\) In analysing the results it was found necessary to introduce a fourth category of “no dominant land type”.
3.4 Tenure

Land tenure is an important factor that may influence the ease with which farmers can adapt either through changing practices, diversification opportunities or ease of access to environmental schemes.

83% (± 2%) of upland farms own at least some part of their land, 37% (±3%) have a tenancy agreement covering at least one year and 12% (±2%) have short term agreements of less than one year (Figure 3.7). Longer term tenancies are more common on full time commercial farms (occurring on 48% ±4%) than on less commercial farms whereas short term agreements are more frequent for those for whom the farm is a hobby/lifestyle choice. Just 0.5% (±0.4%) of upland farms had contract or share farming agreements.

Around a quarter of upland farms (27% ± 3%) have a combination of tenure arrangements, mostly a mixture of owner occupation and longer term (more than one year) tenancies on full time and, to a lesser extent, part time farms.

3.5 Common land

There may be particular issues with common land, especially with regards to the Single Payment Scheme, environmental payments and cross compliance as well as grazing and other land management regimes. The survey collected information on the proportion of
moorland (by area) that was sole occupancy, common land or other shared grazing (excl commons).

Figure 3.8: Proportion of grazed moorland area that is either sole occupancy, common land or other shared occupancy by upland region

Note: There is insufficient data to provide reliable results for the Welsh Borders

Almost half (46% ±5%) of farmed moorland was found to be common land and a similar proportion was found to be of sole occupancy. The remainder (8% ± 3%) was shared grazing (but not on commons). The survey results suggest that there is no grazing on common land within the Peak District (Figure 3.8) - almost all grazing was on land of sole occupancy (96% ±7%) with the remainder being shared grazing but not on common land. There is very little common land within the Peak District (Table 3.3 and Figure 3.8) and it is possible that those that may be grazing this land were either not sampled or did not respond to the survey.

Table 3.3: Proportion of upland regions categorised as common land

<table>
<thead>
<tr>
<th>Region</th>
<th>Total area (000s ha)</th>
<th>Common land area (000s ha)</th>
<th>% of total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Pennines and Borders</td>
<td>567</td>
<td>62</td>
<td>11%</td>
</tr>
<tr>
<td>Lake District</td>
<td>321</td>
<td>82</td>
<td>26%</td>
</tr>
<tr>
<td>Yorkshire Dales and Bowland</td>
<td>358</td>
<td>63</td>
<td>18%</td>
</tr>
<tr>
<td>North Yorkshire Moors</td>
<td>113</td>
<td>16</td>
<td>14%</td>
</tr>
<tr>
<td>South Pennines</td>
<td>168</td>
<td>15</td>
<td>9%</td>
</tr>
<tr>
<td>Peak District</td>
<td>262</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Welsh Borders</td>
<td>90</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>SW Moors</td>
<td>200</td>
<td>48</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: Map of Common Land⁹, Defra 2006

Farms with less than 20ha of LFA land and those classified as mainly other grassland had the greatest proportions of common land (Figure 3.10).

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⁹ Parcels of land registered as common land under the Commons Registration Act 1965, digitised between 1988 and 1993 at a scale of 1:50,000. Superseded by the Countryside and Rights of Way Act 2000 - Registered Common Land dataset.
3.6 Summary

The key findings in this section are:

- 96% (±2%) of upland farmers reported that they had a sheep, beef and/or dairy enterprise.
• Approximately three quarters (76% +/-3%) of upland farms have sheep and this is the predominant enterprise type in most regions, particularly in the Lake District and Yorkshire Dales/Bowland regions.

• The majority of upland farms (60% +/-3%) are full time commercial enterprises\textsuperscript{10}, and a further 22% ( +/-3%) are run on a semi (or part-time) commercial basis. The remainder were found to be run either as a hobby or lifestyle choice (10% +/-2%) or let out all of their land on a short term basis (8% +/-2%).

• Overall, 27% ( +/-2%) of upland farms farmed some moorland, 54% ( +/-3%) farmed some rough grazing and 86% ( +/-2%) farmed some other better quality grassland.

• Those farms classed as "mainly moorland" tend to have a greater proportion of older farmers than those with better quality grassland. They are also more likely to rent land (whether as a mixture of owned and tenanted land or tenanted only) and classify themselves as full or part time commercial businesses.

• 83% ( +/-2%) of upland farms own at least some part of their land, 37% ( +/-3%) have a tenancy agreement covering at least one year and 12% ( +/-2%) have short term agreements of less than one year.

• Almost half (46% +/-5%) of farmed moorland was found to be common land and a similar proportion was found to be of sole occupancy. The remainder (8% +/- 3%) was shared grazing (but not on commons).

\textsuperscript{10} Respondents were asked to classify their farm themselves.
4. Economics of the farm business

Income on LFA grazing livestock farms (i.e. beef and sheep) has been consistently below the average for all types of farm. The average Farm Business Income (FBI) on these farms was £10,400 in 2007/08, but this income is not sufficient to cover the opportunity costs of the unpaid labour (provided mainly by the farmer and family) estimated at £20,300 per farm. Although, the average FBI on these farms is expected to have risen to £15,000 per farm in 2008/09, this is still relatively low. These farms would have made a loss without income from the Single Payment Scheme, agri-environment payments and (to a lesser extent) diversified activities (Figure 4.1).

The uplands survey asked farmers about household income, cash flow and the ease of obtaining external finance as well as exploring current and future opportunities for on- and off-farm diversification.

4.1 Household income

The farm business accounts for less than half of household income for 49% (±3%) of upland farms. The larger the farm, the greater its contribution (Figure 4.2), but there is a marked difference between full time (those requiring at least 1 FTE worker) and spare or part time farms. However, these smallest farms are less likely to be commercial ventures.

Figure 4.2: Contribution of the farm business to household income by farm size (proportion of upland farms)

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11 The opportunity cost principle measures cost by reference to the alternatives forgone. This essentially estimates the cost of the labour that would have been required.

12 The survey found that 24% of those with “spare-time” farms and 6% of those with “part-time “farms classified their farm as a hobby/lifestyle choice. See section 3.2.
For those classifying themselves as full time commercial farms, the farm business formed all or most of the household income for 79% (±3%) compared to 12% (±5%) of those classifying themselves as part time commercial and 16% (±8%) of those where the farm is a hobby or lifestyle choice.

Concentrating on full time commercial farms, a greater proportion of household income tends to come from sources other than the farm business for those with only beef or only sheep enterprises (Figure 4.3).

**Figure 4.3:** Proportion of household income from the farm business by enterprise type (full time commercial farms only)

4.2 Cash flow and external finance

The response to this question needs careful interpretation as farmers were asked to agree with only one of the statements presented. We cannot, therefore, infer that all those that did not indicate that they had a manageable level of debt actually have an unmanageable level of debt. Approximately half of commercial farms (either full or part time) in the uplands incur debt (Figure 4.4) and of these, half report having a manageable level of debt and a third incur debt on a short term basis only. 18% (±4%) of those commercial farms that currently borrow are becoming increasingly worried about debt.

**Figure 4.4:** Debt concerns by commercial status (proportion of upland farms)

There was little difference in response between tenure types. However, when livestock type is taken into consideration, those farms with dairy cows were less likely to be debt free than those without dairy cows.
Farms were further asked about the ease of obtaining external finance to help run the business. Of those that borrow, farms that rent in all of their land and part time commercial farms were most likely to report that obtaining external finance was becoming much more
difficult. Younger farmers and those farming on the North Yorkshire Moors (Figure 4.5) were most likely to report that costs are “becoming a bit more difficult”.

4.3 Diversification

Diversified activities provide another source of income for many farms. For England as a whole, Farm Business Survey data for 2007/08\(^\text{13}\) show that 51\% of farms had a diversified activity and that these generated 15\% of the total income of farm businesses. For farms of type LFA Grazing Livestock, 41\% had some diversified activity contributing 21\% of farm business income.

Results from the uplands survey suggest that 56\% (±3\%) of upland farms have a diversified activity or other income contributing to household income. Almost half (48\% ±3\%) of upland farms have some form of off-farm diversification or other income (eg second job or contract work) rising to 72\% (±7\%) of those classifying themselves as part time commercial (Table 4.1). 25\% (±3\%) of upland farms have an on-farm diversified enterprise such as a farm shop or Bed & Breakfast.

Table 4.1: Percentage of upland farmers with diversified activities or other income by commercial status

<table>
<thead>
<tr>
<th>Commercial Status</th>
<th>Diversified activity or other income</th>
<th>Of which:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>on-farm diversification</td>
<td>off-farm diversification or other income</td>
</tr>
<tr>
<td>Full time commercial</td>
<td>51 (±4)</td>
<td>27 (±4)</td>
<td>40 (±4)</td>
</tr>
<tr>
<td>Part time commercial</td>
<td>73 (±7)</td>
<td>25 (±7)</td>
<td>72 (±7)</td>
</tr>
<tr>
<td>Hobby/lifestyle choice</td>
<td>43 (±10)</td>
<td>14 (±14)</td>
<td>34 (±14)</td>
</tr>
<tr>
<td>All upland farms</td>
<td>56 (±3)</td>
<td>25 (±3)</td>
<td>48 (±3)</td>
</tr>
</tbody>
</table>

4.3.1 On-farm diversification

The survey results suggest that 25\% (±3\%) of upland farms have an on-farm diversified enterprise although for 6\% (±2\%) the enterprise is not financially important. Regionally on-farm diversification appears slightly less prevalent in the South Pennines and Welsh Borders (Figure 4.6). Those that own at least part of the land that they farm are more likely to have some form of on-farm diversification than those that rent all of their land (Figure 4.7).

Of those with no current on-farm diversified activity 3\% (±1\%) are actively developing a new activity and 13\% (±3\%) are thinking about a new activity. However, 28\% (±4\%) had not thought about on-farm diversification and for 56\% (±4\%) there is either no scope or the farm is not suitable.

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\(^{13}\)“Farm Diversification in England: Results from the Farm Business Survey 2007/08”. The results relate to farm of at least 0.5 Standard Labour Requirement, a size considered sufficient to occupy a farmer half-time and thus are not directly comparable with those collected as part of the Upland Farm Practices Survey due to the different thresholds and different definitions of diversification.
Of those with an on-farm diversified activity, 31% (±7%) are actively developing a new activity, 24% (±6%) are thinking about a new activity and 45% (±7%) suggest that there is either no scope or the farm is not suited for further on-farm diversification.

Figure 4.6 Contribution of on-farm diversification activities to income by region

Figure 4.7 Contribution of on-farm diversification activities to income by tenure type

4.3.2 Off-farm diversification or other income

48% (±3%) of upland farms have an off-farm diversified activity or other income such as a second job or contract work (Table 4.1). The regional distribution is shown in Figure 4.8.

Figure 4.8 Contribution of off-farm diversification activities or other income by region
Part time commercial farms were found to be more likely to have an off-farm diversified activity or other income than full time farms or those for whom the farm is a hobby/lifestyle choice. It is not surprising that those aged 65 or over were less likely than younger farmers to have an off-farm diversified activity or other income.

Of those with no current off-farm diversification or income, 1% (±1%) are actively developing a new activity and 4% (±2%) are thinking about a new activity. However, for 52% (±5%) there is no scope or there are no plans and 43% (±5%) have never thought about it.

Of those with current off-farm diversification or income, 13% (±3%) are actively developing a new activity and 16% (±4%) are thinking about a new activity. However, for 71% (±5%) there is no scope or there are no plans for further off-farm diversification.

### 4.3.3 Future opportunities

85% (±3%) of upland farmers either agree or strongly agree that there are fewer opportunities for wider income generation for upland farms than for lowland farms. The reasons for this were not explored, but factors are likely to include greater distances from population centres and land suitability.

![Figure 4.9: There are fewer opportunities for diversification for upland farms than for lowland farms by region (proportion of upland farmers)](image)

Upland farmers in the South Pennines were more likely than those in other regions to think that upland farmers had fewer diversification opportunities (Figure 4.9). Those upland farmers that classified their farms as mostly moorland felt more strongly about the lack of diversification opportunities than those with better quality grassland (Figure 4.10).

The majority of upland farmers (63% ±3%) feel that there will be little change in the opportunities for wider income generation from diversification in the uplands. The remainder were evenly split between thinking that opportunities would increase (17% ±3%) or decrease (19% ±3%). Those upland farmers classified as “mainly moorland” were less likely than those with better quality grassland to suggest that opportunities would increase.

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14 Note 57% (±14%) of those for whom the farm is a hobby or lifestyle choice were aged 65 or over.
4.4 Summary

The key findings in this section are:

- The farm business forms less than half of household income on 49% (±3%) of upland farms. The larger the farm, the greater its contribution.

- Approximately half of commercial farms (either full or part time) in the uplands incur debt and of these, half report having a manageable level of debt and a third incur debt on a short term basis only\(^\text{15}\).

- Of those that borrow, farms that rent in all of their land and part time commercial farms were most likely to report that obtaining external finance was becoming much more difficult. Younger farmers and those farming on the North Yorkshire Moors were most likely to report that costs are “becoming a bit more difficult”.

- 56% (±3%) of upland farms have a diversified activity or other income contributing to household income. Almost half (48% ±3%) have some form of off-farm diversification or other income (eg second job or contract work). 25% (±3%) of upland farms have an on-farm diversified enterprise such as a farm shop or Bed & Breakfast.

- Of those with no current on-farm diversified activity 3% (±1%) are actively developing a new activity and 13% (±3%) are thinking about a new activity. However, 28% (±4%) had not thought about on-farm diversification and for 56% (±4%) there is either no scope or the farm is not suitable.

- Of those with no current off-farm diversification or income, for 52% (±5%) there is no scope or there are no plans and 43% (±5%) have never thought about it.

\(^\text{15}\) The response to this question needs careful interpretation as farmers were asked to tick only one of the boxes presented. We cannot, therefore, infer that all those that did not indicate that they had a manageable level of debt actually have an unmanageable level of debt.
• 85% (±3%) of upland farmers either agree or strongly agree that there are fewer opportunities for wider income generation for upland farms than for lowland farms.

• The majority of upland farmers (63% ±3%) feel that there will be little change in the opportunities for wider income generation from diversification in the uplands.
5. **Agri-environment schemes**

Agri-environment schemes provide funding to farmers and land managers to farm their land in a way which is sensitive to the environment. Until 2005, these were targeted at specific areas of the country considered to be of high conservation value largely through Environmentally Sensitive Areas (ESAs) or the Countryside Stewardship Scheme (CSS). ESA and CSS agreements last for 10 years and existing agreements will continue until they expire. The last ESA and CSS agreements will expire in 2014. The Wildlife Enhancement Scheme (WES) was a management agreement scheme for Sites of Special Scientific Interest (SSSIs). As part of a 5 year agreement, payments were offered for annual management and/or capital works to maintain or restore habitats or works to support specific species. Some existing WES agreements will continue until 2012.

Environmental Stewardship (ES) was introduced in March 2005, providing funding to farmers and land managers throughout England who deliver effective environmental management on their land. ES is a two tiered scheme providing an Entry Level (ELS) and a Higher Level (HLS). It replaced and built on previous agri-environment schemes including ESA and CSS. However, double funding rules mean that land covered by ESAs and CSS cannot also be entered into Environmental Stewardship until the existing agreement ends. The subsequent movement of this land into Environmental Stewardship agreements will be important to continue to deliver environmental benefits. Figure 5.1 illustrates the current land under each of these schemes in the LFA.

*Figure 5.1: Agri-environment uptake within Less Favoured Areas*

A new strand, known as Uplands ELS, will be introduced in 2010 replacing the area based Hill Farm Allowance. As with the current Entry Level Stewardship Scheme, farmers will have

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16 Further information on ESAs, CSS and WES can be found on the Natural England website at [http://www.naturalengland.org.uk/ourwork/farming/funding/closedschemes/default.aspx](http://www.naturalengland.org.uk/ourwork/farming/funding/closedschemes/default.aspx)
to meet a points threshold in Uplands ELS, based on the size of their farm and type of land, to qualify for funding. Farmers will obtain points by meeting a series of requirements and selecting from a menu of land management options.

5.1 Contribution to income

The survey found that 71% (±3%) of upland farmers had some kind of agri-environment agreement (see section 5.2). Income from agri-environment agreements contributes either moderately or significantly to the farm business for 85% (±3%) of farms with agreements. This is backed up by evidence from the Farm Business Survey which shows that agri-environment and other payments (excluding SPS and HFA payments) equated to approximately half of average Farm Business Incomes\(^{17}\) on LFA grazing livestock farms in England in 2006/07 and 2007/08 (see Figure 4.1). Upland Survey results suggest that there appears to be little difference when the commercial status of the farm is considered (Figure 5.2). However, there does appear to be a clear pattern in response when the quality of grassland is taken into consideration. Environmental schemes contribute significantly to farm incomes for almost two thirds (64% ±11%) of those classifying themselves as “mainly moorland”, 41% (±8%) for “mainly rough grazing” and 21% (±4%) for “mainly other grassland”.

Figure 5.2: Contribution of environmental schemes to the farm business by commercial status (left) and quality of grassland (right) (% of farms with agreements)

Commercial farms with dairy cows were more likely to respond that agri-environment payments were not financially important to the farm business than those without. The converse was true for farms with beef cattle and farms with sheep (Figure 5.3). This is not surprising given that dairy cows will graze the better grassland (see Figure 5.2).

\(^{17}\) This compares with around a third for lowland grazing livestock farms less than 20% for other farm types.
Figure 5.3: Contribution of environmental schemes to the farm business by animal type on farm (full or part time commercial farms only)

Note: A farm may have more than one animal type present

A third of upland farmers (33% ±4%) with agreements consider that environmental payments have increased in importance to the farm business since 2005, 58% (±4%) consider that they are unchanged and 8% (±2%) consider that they have reduced. Those with farms that were “mainly moorland” or “mainly rough grazing” were more likely to report an increase in importance than those that were “mainly other grassland” (Figure 5.4). There also appears to be some link with farm size; those with the greatest LFA areas were the most likely to suggest an increase\(^{18}\) in importance, but there was little difference in response when other factors were considered such as commercial status or tenure.

Figure 5.4: Change in contribution of environmental payments to the farm business since 2005 by quality of grassland

Upland farmers were also asked about the future importance of environmental schemes. Again there was a clear link with the quality of grassland (Figure 5.5), with the importance of environmental payments increasing as the quality of the grassland decreases.

\(^{18}\) Table 19 Uplands Survey Statistics Notice.
Figure 5.5: Future contribution of environmental payments to the farm business by quality of grassland

- Mainly moorland
- Mainly rough grazing
- Mainly other grassland

5.2 Current Scheme uptake

The survey found that 71% (±3%) of upland farmers had some kind of agri-environment agreement. Uptake varies by the commercial status of the farm and by farmer’s age (Figure 5.6), with full time commercial farms and younger farmers more likely to have an agri-environment agreement. Those that rent some or all of their land are slightly more likely to have an agreement even when full time commercial farms are considered on their own (Figure 5.7), although the difference between these farms and those that own all of their land is not statistically significant.

Figure 5.6: Proportion of upland farms with agri-environment schemes by commercial status of farm (left) and age of farmer (right)

Figure 5.7: Proportion of upland farms with agri-environment schemes by farm tenure for all farms (left) and full time commercial farms only (right)
There is a clear distinction in agri-environment scheme uptake when the type of grassland is considered (Figure 5.8). 93% (±8%) of those that have “mainly moorland” have some type of agri-environment agreement compared to 79% (±7%) of those that have “mainly rough grazing” and 67% (±4%) of those that have “mainly other grassland”. For those classified as “mainly moorland” the most common agreement type is ESA (held by 42% (±11%) of upland farmers), followed by ELS (32% ±9%) and CSS (27% ±9%). For those classified as “mainly rough grazing” or “mainly other grassland”, ELS was the most common type of agreement followed by ESA and CSS. Figure 5.1 illustrates the current areas covered by ESA and CSS agreements in the LFA. Uptake of each scheme is looked at separately in the following sections.

5.2.1 Environmentally Sensitive Areas (ESA) and Countryside Stewardship Schemes (CSS)

In 1987, the Environmentally Sensitive Area\(^{19}\) (ESA) scheme became the first agri-environment scheme to be launched in the UK, offering incentives to encourage farmers to adopt agricultural practices that would safeguard and enhance areas of high landscape, wildlife or historic value. A total of 22 ESAs were designated in 4 Stages between 1987 and 1994. 8 ESAs covered upland areas – Dartmoor, Exmoor, Clun, Shropshire Hills, South West Peak, North Peak, Lake District and Pennine Dales (Figure 5.9). The Countryside Stewardship scheme (CSS) was introduced in 1991 and was the principal scheme for conserving and improving the countryside outside ESAs. Both of these schemes closed to new entrants in 2004. Future intentions of ESA and CSS agreement holders are investigated in section 5.3.

37% (±3%) of upland farmers have land remaining in ESA (23% ±3%) or CSS (17% ±2%) agreements. As might be expected given the location of ESAs, these agreements are more prevalent in the South West Moors, Welsh Borders and Lake District (Figure 5.10).

\(^{19}\) Further information on ESAs and CS can be found at http://www.naturalengland.org.uk/ourwork/farming/funding/closedschemes/esa/default.aspx
The land covered by ESA and CSS (so called Classic scheme) agreements cannot also be included within Environmental Stewardship. However, farmers may have a mixture of agreements covering different parts of their farms. The survey data suggest (Table 5.1) that 24% (±4%) of those with Classic scheme agreements also have an ELS agreement, 6% (±2%) also have an HLS agreement, 3% (±2%) have a Wildlife Enhancement Scheme (WES) agreement and 4% (±2%) have another (unspecified environmental scheme agreement). ELS agreements appear more common in the North Pennines/Borders and
Yorkshire Dales/Bowland regions which have a higher proportion of farms with CSS agreements.

Table 5.1: Proportion of upland farms with agri-environment schemes by upland region for those with an ESA or CSS agreement (% of farms with agreements)

<table>
<thead>
<tr>
<th>Region</th>
<th>ELS / OELS</th>
<th>HLS</th>
<th>ESA</th>
<th>CSS</th>
<th>WES</th>
<th>WES schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Pennines and the Borders</td>
<td>37±10</td>
<td>11±7</td>
<td>31±12</td>
<td>74±12</td>
<td>3±3</td>
<td>0±0</td>
</tr>
<tr>
<td>Lake District</td>
<td>11±7</td>
<td>2±3</td>
<td>89±8</td>
<td>16±9</td>
<td>6±5</td>
<td>3±4</td>
</tr>
<tr>
<td>Yorkshire Dales and Bowland</td>
<td>55±12</td>
<td>14±8</td>
<td>41±11</td>
<td>75±11</td>
<td>1±2</td>
<td>3±3</td>
</tr>
<tr>
<td>Peak District</td>
<td>15±10</td>
<td>1±2</td>
<td>55±16</td>
<td>51±16</td>
<td>6±7</td>
<td>9±8</td>
</tr>
<tr>
<td>Welsh Borders</td>
<td>12±11</td>
<td>6±11</td>
<td>88±11</td>
<td>12±11</td>
<td>0±0</td>
<td>0±0</td>
</tr>
<tr>
<td>The SW Moors</td>
<td>16±10</td>
<td>5±6</td>
<td>90±9</td>
<td>14±9</td>
<td>0±0</td>
<td>7±8</td>
</tr>
<tr>
<td>All upland regions</td>
<td>24±4</td>
<td>6±2</td>
<td>61±5</td>
<td>45±5</td>
<td>3±2</td>
<td>4±2</td>
</tr>
</tbody>
</table>

Note: There is insufficient data to present separate results for the North Yorkshire Moors and South Pennines regions. However, responses from these regions are included in the results for all upland regions.

5.2.2 Environmental Stewardship

The survey found that Entry Level Stewardship (ELS) or its organic equivalent (OELS) agreements were the most common agreement types, held by 39% (±3%) of upland farms. 9% (±2%) of upland farms had Higher Level Stewardship agreements.

As would be expected given double funding rules, ELS uptake is greatest in regions where Classic scheme agreements are less prevalent. ELS uptake is lowest in the Lake District and South West Moors (Figure 5.11) where there is still a considerable area under ESA agreements.

For ELS agreements there is a clear relationship with the commercial status of the farm and the farmer’s age (Figure 5.12), with younger and full time commercial farms being more
likely to be part of the scheme. For HLS, commercial farms (including those classing themselves as part time) are more likely to be part of the scheme, but there appears to be little difference in uptake by age.

Figure 5.12: Proportion of upland farms with Environmental Stewardship agreements by commercial status of farm (left) and age of farmer (right)

5.3 Future scheme uptake

This section focuses on farmers’ future intentions. From the data collected, it is possible to focus on various sub-groups such as current ESA and CSS agreement holders or those who currently do not have any agri-environment agreements. This section will provide an analysis for these groups before considering in more detail the characteristics of those intending to join (and not join) ELS, HLS and Uplands ELS.

5.3.1 Current non-agreement holders

Section 5.2 highlighted that 29% (±3%) of upland farms do not have an agri-environment agreement and that these were most likely to have older farmers, be farms that are not run on a full time commercial basis and/or mainly with better quality grassland. Around half (54% ±7%) of those without a current agreement stated that they had no interest in joining an agri-environment scheme. These were more likely to be aged 65 and over or those that classified their farm as a hobby/lifestyle choice. Those without a current agreement were also less likely to consider that maintaining the environment was part of the process of upland farming than those with or interested in having an agreement (Figure 5.13).

Figure 5.13: Attitude to the environment by interest in agri-environment agreements
It is encouraging that 23% (±6%) of those with no current agreement would be interested in joining ELS, 31% (±8%) in joining Uplands ELS, and 7% (±4%) in joining HLS. 6% (±4%) expressed an interest in joining other (unspecified) schemes including those run by National Parks. The characteristics of these farms will be examined in sections 5.3.3 to 5.3.5.

5.3.2 Current ESA and CSS agreement holders

There is a considerable amount of land remaining under ESA or CSS agreements in the uplands (Figure 5.1), and it is important to have an understanding of farmers’ intentions for this land once their current agreements expire20.

The survey results suggest that 82% (±5%) of those with these agreements would be interested in joining another scheme. 47% (±6%) expressed an interest in joining HLS, 25% (±5%) in joining ELS and 18% (±4%) in other unspecified schemes (including those run by National Parks). 53% (±6%) of those with or intending to have SDA land expressed an interest in joining Uplands ELS.

CSS agreement holders were more likely to indicate no interest in joining further schemes than ESA agreement holders, with the interest declining as the quality of grassland improves22. For ESA agreement holders, those in the Lake District23 were more likely than in other regions to suggest that they wanted no other environmental agreements.

5.3.3 Interest in joining Entry Level Stewardship

21% (±3%) of upland farmers (including those that may already have an ELS agreement24) expressed an interest in joining ELS. For those not already in ELS, interest is greatest in the South Pennines (35% ±15% of farmers) and North Pennines/Borders (30% ±12%) regions and least in the Peak District (20% ±8%) and Yorkshire Dales/Bowland (18% ±9%) regions (Figure 5.15).

20 All ESA and CSS agreements will have expired by 2014.
21 The figures for ELS and HLS include some current agreement holders – the farm may have separate areas of land in different schemes.
22 34% of those with CSS agreements and classified as “mostly other grassland”, 15% of those classified as “mostly rough grazing” and 0% of those classified as “mostly moorland” stated that they are interested in “no other environmental agreements”.
23 23% (±11%) of farmers with ESA agreements in the Lake District would be interested in “no other environmental agreements”. This compares with 13% (±5%) for all upland regions.
24 The farm may have other land (say under ESA or CSS agreements) that is intended for future ELS agreement.
Figure 5.15: Interest from upland farms in joining ELS by region

Figure 5.16: Proportion of upland farms interested in joining ELS by age (top left), commercial status (top right) quality of grassland (bottom left) and LFA area (bottom right). Excludes existing ELS agreement holders.
Excluding current ELS agreement holders, those with current Classic scheme (CSS or ESA) agreements are slightly more likely to want to join ELS (28% ±6%) than those without (22% ±6%). For those without Classic scheme agreements, interest decreases with age. For both groups, interest in ELS increases with the amount of LFA land farmed (Figure 5.16).

5.3.4 Interest in joining Higher Level Stewardship

29% (±3%) of upland farmers (including those that may already have an HLS agreement25) expressed an interest in joining HLS. For those not already in HLS, interest is greatest in the South West Moors (39% ±12%) and the Lake District (37% ±9%) regions and least in the North Yorkshire Moors (14% ±7%) and South Pennines (18% ±9%) regions (Figure 5.17).

Figure 5.17: Interest from upland farms in joining HLS by region

Those with current Classic scheme (CSS or ESA) agreements were much more likely (48% ±6%) to express an interest in HLS than those without (20% ±4%). For those without Classic scheme agreements, interest is lower for those aged 65 and over. For both groups, interest in HLS tends to increase with the commercial status of the farm and the area of LFA farmed and tends to decrease as the quality of grassland increases (Figures 5.18).

25 The farm may have other land (say under ESA or CSS agreements) that is intended for future HLS agreement.
5.3.5 Interest in joining Uplands Entry Level Stewardship

In 2010, support for upland farmers will change from the area based Hill Farm Allowance, and be replaced with a new strand of entry level Environmental Stewardship aimed specifically at the uplands, to be known as Uplands ELS. Uplands ELS is a more targeted scheme that will reward farmers in Severely Disadvantaged Areas (SDA) for the provision and maintenance of specific landscape and environmental benefits. As with the current Entry Level Stewardship Scheme, farmers will have to meet a points threshold in Uplands ELS, based on the size of their farm and type of land, to qualify for funding. Farmers will obtain points by meeting a series of requirements and selecting from a menu of land management options.

Of those upland farmers with (or intending to farm) land in the SDA, 48% (±4%) expressed an interest in joining Uplands ELS, covering some 65% (±6%) of land. In terms of proportion of farmers, interest is greatest in the north of England, particularly in the North Yorkshire...
Moors and the Yorkshire Dales/Bowland regions (Figure 5.19). In the Peak District and the Welsh Borders, the proportion of SDA land covered by those interested in joining UELS is much greater than the proportion of farmers.

Figure 5.19: Interest in joining Uplands ELS by region (farms with or intending to have SDA land)

Those with current Classic Scheme (CSS or ESA) agreements are slightly more likely to express an interest in Uplands ELS than those without (53% ±6% vs 45% ±5%). For both groups, interest is lower for those aged 65 and over, increases with the commercial status of the farm and the area of LFA farmed and decreases as the quality of grassland increases (Figures 5.20 and 5.21).

Figure 5.20: Proportion of farmers interested in joining Uplands ELS by age (left) and commercial status (right)
Figure 5.21: Proportion of farmers interested in joining Uplands ELS by quality of grassland (left) and area of LFA farmed (right) - farms with or intending to have SDA land.

5.4 Summary

The key findings in this section are:

- 71% (±3%) of upland farmers have some form of agri-environment agreement. Full time commercial farms and younger farmers are more likely to have an agri-environment agreement. Uptake increases as the quality of grassland decreases.

- Income from these agreements contributes either moderately or significantly for 85% (±3%) of these farms, with the importance of these payments increasing as the quality of the grazing land decreases.

- A third of upland farmers (33% ±4%) with agri-environment agreements consider that environmental payments have increased in importance to the farm business since 2005. This response was most likely to come from larger farms and those classed as “mainly moorland” or “mainly rough grazing”.

- More than half of farms that were “mainly moorland” considered that environmental payments would become at least as important or more important than production in the future.

- 37% (±3%) of upland farms have land remaining in Environmentally Sensitive Area (ESA) or Countryside Stewardship Scheme (CSS) agreements.

- 39% (±3%) of upland farms have ELS agreements with younger and full time commercial farms more likely to be part of the scheme. 9% (±2%) of upland farms had HLS agreements with uptake more likely on commercial farms than those for whom the farm is a hobby or lifestyle choice.

- 82% (±5%) of those with ESA or CSS agreements expressed an interest in joining another agri-environment scheme with 47% (±6%) interested in joining HLS, 25% (±5%) in joining ELS and 18% (±4%) in other agri-environment schemes. 53% (±6%) of those with ESA or CSS agreements expressed an interest in joining Uplands ELS.
CSS agreement holders were less likely to express an interest in other schemes than ESA agreement holders.

- Including current agreement holders, 21% (±3%) of farmers would be interested in joining ELS and 29% (±3%) would be interested in joining HLS. Interest is greatest from current ESA or CSS agreement holders (more so for HLS than ELS).

- Of those upland farmers with (or intending to farm) land in the SDA, 48% (±4%) expressed an interest in joining Uplands ELS, covering some 65% (±6%) of land. Interest is greatest in the north of England, particularly in the North Yorkshire Moors and the Yorkshire Dales/ Bowland regions.
6. Grazing

Grazing land within the Less Favoured Areas (LFA) consists of moorland, rough grazing and other better quality grasslands. Within these broad definitions there are a range of habitats, including 8 UK BAP26 priority habitats, mainly associated with moorland and rough grazing. These include various types of dwarf shrub heath, blanket bog, several types of grassland (including acid grassland), montane habitats, broadleaved woodlands, coniferous woodlands, and inland rock such as limestone pavement.

![Sheep grazing moorland](image)

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The landscape of these areas has, to some extent, been determined by man’s use of the land, mainly through grazing livestock. The habitats and species that exist may require some grazing of the land for them to be maintained. Whereas previously there were issues with overgrazing linked to headage based, agricultural support systems, these have now been replaced with concerns of undergrazing or abandonment, particularly of moorland, and some intensification on better grasslands following the move to area based support for the uplands in 2001 (Hill Farm Allowance) and the introduction of the decoupled Single Payment in 2005.

There will be further changes to financial support for upland farmers in 2010 with the replacement of Hill Farm Allowance with Uplands ELS. As with the current Entry Level Stewardship Scheme (ELS), farmers will have to meet a points threshold in Uplands ELS, based on the size of their farm and type of land, to qualify for funding. Farmers will obtain points by meeting a series of requirements and selecting from a menu of land management options. Uplands ELS will introduce a minimum stocking rate on moorland. This is designed to reward farmers for maintaining moorland grazing and delivering the environmental benefits this brings.

Assessing changes made to grazing regimes and changes which are proposed gives some indication as to whether there are likely to be significant impacts in upland areas.

6.1 Changes to grazing levels over last 4 years

Overall, the survey found that the majority of upland farms had not made any changes to their grazing levels in the last four years (Table 6.1). However, where there had been change this was largely to reduce grazing. The proportion of farms that have reduced their grazing decreased as the quality of grassland improved. This picture is mirrored at a regional level (Figure 6.2).

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Table 6.1 Percentage of upland farms making changes to grazing in last four years by grassland type

<table>
<thead>
<tr>
<th>Grassland Type</th>
<th>Stopped grazing</th>
<th>Reduced grazing</th>
<th>No change</th>
<th>Increased grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moorland</td>
<td>6</td>
<td>30</td>
<td>59</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>±3</td>
<td>±5</td>
<td>±5</td>
<td>±2</td>
</tr>
<tr>
<td>Rough grazing</td>
<td>1</td>
<td>16</td>
<td>81</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>±1</td>
<td>±3</td>
<td>±3</td>
<td>±1</td>
</tr>
<tr>
<td>Other grassland</td>
<td>0</td>
<td>11</td>
<td>84</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>±0</td>
<td>±2</td>
<td>±3</td>
<td>±1</td>
</tr>
</tbody>
</table>

Figure 6.2 Changes in grazing in the last four years by grassland type and region (proportion of upland farms)

* There is insufficient data for moorland in the Welsh Borders

There appears to have been a greater degree of change occurring in the South West Moors than in other regions. Some care does need to be taken in interpretation due to the wide confidence intervals for the regional estimates (Figure 6.3). However, moorland farms in the
South West were significantly more likely to have had some change than farms in the Lake District (at 1% level) and the North Pennines and Borders (at 5% level).

Figure 6.3 Changes in moorland grazing in the last four years by region (proportion of upland farms)

There is little evidence that those that have reduced or stopped grazing moorland have in turn increased their grazing on better quality grassland (Table 6.2). 35% (±9%) had also reduced their grazing on “rough grazing” and 22% (±8%) had reduced their grazing on other grassland²⁷ whilst the remainder had largely made no change to their grazing levels.

Table 6.2 Changes in grazing in last four years by grassland type for those farms reducing or stopping moorland grazing (percentage of upland farms)

<table>
<thead>
<tr>
<th></th>
<th>Stopped grazing</th>
<th>Reduced grazing</th>
<th>No change</th>
<th>Increased grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rough grazing</td>
<td>0</td>
<td>35</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>±0</td>
<td>±9</td>
<td>±10</td>
<td>±5</td>
</tr>
<tr>
<td>Other grassland</td>
<td>0</td>
<td>22</td>
<td>71</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>±0</td>
<td>±8</td>
<td>±9</td>
<td>±5</td>
</tr>
</tbody>
</table>

Those reducing their level of moorland grazing were more likely to have an agri-environment agreement, to be classified as full time commercial or to be larger farms. Whilst those stopping moorland grazing were more likely to be the smallest farms, classify themselves as part time commercial, to have an agri-environment agreement or to have common land, the differences between groups are not significant (Figure 6.4).

²⁷ There is insufficient data to present these figures on a regional basis.
Figure 6.4 Changes in moorland grazing levels by whether the farm has an agri-environment agreement28 (top left) commercial status (top right) and age of farmer (mid left), type of moorland (mid right) and economic size (bottom)

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28 There was insufficient data to provide results for those for whom the farm was a hobby/lifestyle choice.
The most common reason given for stopping or reducing grazing levels was “environmental schemes” followed by the “economics of hill stock” (Figure 6.5). If we focus only on those that stopped grazing moorland, the most common reasons given were “personal circumstances (e.g. health, age)” (53% ±25%) and “economics of hill stock” (48% ±26%).

It is also worth focusing on the South West Moors, where survey data suggested that there were more likely to have been changes to grazing regimes. Care needs to be taken in the interpretation, as the number of responses are low and the confidence intervals quite wide, but in this region, those reducing or stopping grazing on moorland were less likely to cite environmental schemes or the economics of hill stock but more likely to cite personal circumstances (such as age or health) than those in the North Pennines/Borders, Lake District or Yorkshire Dales/Bowland regions.

6.2 Intended changes to grazing levels over the next 2 years

The survey also collected data on farmers’ intended changes over the coming two years. This data should be interpreted with some care as it represents their intention on the day that they completed the form (March 2009) and future circumstances may change actual outcomes.

Table 6.3 Intended changes in grazing in the next two years by grassland type (percentage of upland farms)

<table>
<thead>
<tr>
<th>Grassland Type</th>
<th>Stop grazing</th>
<th>Reduce grazing</th>
<th>Keep grazing levels about the same</th>
<th>Increase grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moorland*</td>
<td>1 ±1</td>
<td>7 ±3</td>
<td>86 ±4</td>
<td>6 ±3</td>
</tr>
<tr>
<td>Rough grazing</td>
<td>0 ±1</td>
<td>8 ±2</td>
<td>88 ±3</td>
<td>3 ±1</td>
</tr>
<tr>
<td>Other grassland</td>
<td>1 ±1</td>
<td>5 ±2</td>
<td>90 ±2</td>
<td>4 ±1</td>
</tr>
</tbody>
</table>

* These figures differ slightly to those within the Statistics Notice. In producing this analysis, it appears that a small number of farmers may have misinterpreted the questions and completed the question on intended changes to moorland grazing even though they have already stated that they have stopped grazing moorland in the past 4 years – largely stating that they have stopped and intend to stop.
The North Yorkshire Moors had the greatest proportion of farmers (8% ±10%) indicating that they would stop grazing moorland (Figure 6.6). However, the confidence interval around this estimate is very wide and this estimate should therefore be treated with care. The South West Moors is the region most likely to have changes to grazing regimes on moorland. However, similar proportions of farmers indicated that they would reduce and increase grazing suggesting little overall change although it is not possible to determine whether these grazing locations are the same and therefore the consequential impact on the environment.

Figure 6.6 Intended changes to grazing levels in the next two years by grassland type and region (proportion of upland farms)

* There is insufficient data for moorland in the Welsh Borders. Also see note under Table 6.3

Considering all upland regions, those intending to stop grazing moorland were most likely to be those for whom the farm is a hobby or lifestyle choice (Figure 6.7). Approximately one third also intend to reduce grazing levels on rough grazing and a quarter on other grassland (Table 6.4) with the remainder largely intending to keep grazing levels about the same. Those intending to increase grazing on moorland are more likely to be part time commercial farms or to have ESA or CSS agreements.
Table 6.4 Intended changes to grazing levels in the next two years by grassland type for those farms expecting to reduce or stop moorland grazing (percentage of upland farms)

<table>
<thead>
<tr>
<th></th>
<th>Stopped grazing</th>
<th>Reduced grazing</th>
<th>Keep grazing levels about the same</th>
<th>Increased grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rough grazing</td>
<td>0 ±0</td>
<td>34 ±20</td>
<td>60 ±20</td>
<td>7 ±12</td>
</tr>
<tr>
<td>Other grassland</td>
<td>6 ±11</td>
<td>28 ±18</td>
<td>63 ±20</td>
<td>2 ±4</td>
</tr>
</tbody>
</table>

Figure 6.7 Intended changes to moorland grazing levels in next two years by commercial status (left) and type of agri-environment agreement (right)

6.3 Changes in enterprise mix

Grazing is important for the maintenance of many semi-natural habitats in the uplands, encouraging a more heterogeneous sward. Different types of livestock have different grazing styles; sheep graze the sward very short and are more selective whereas cattle leave a longer sward and are less selective. Dairy enterprises can use more intensive farming practices and these may lead to undesirable environmental outcomes.

The survey found that very few upland farms (7% ±2%) intend to change their enterprise mix within the next couple of years. Farmers with dairy cows or those for which the farm is not a hobby or lifestyle choice were more likely to suggest that they intended to change their enterprise mix (Figure 6.8). Those with dairy cows were more likely to suggest a change from dairy to beef (59% ±24%) than to sheep (32% ±23%) indicating a possible change to less intensive farming practices29 (Table 6.5).

29 Based on relatively few responses and the wide confidence intervals should be noted
Figure 6.8 Likelihood of upland farmers to change enterprise mix in next couple of years

Figure 6.9: Proportion of upland farmers with sheep that away-winter sheep by region

Table 6.5 Potential change in enterprise mix by livestock type (percentage of upland farmers intending to change mix)

<table>
<thead>
<tr>
<th></th>
<th>Dairy to beef</th>
<th>Dairy to sheep</th>
<th>Beef to dairy</th>
<th>Beef to sheep</th>
<th>Sheep to beef</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have sheep</td>
<td>23 ±12</td>
<td>19 ±11</td>
<td>0 ±10</td>
<td>27 ±12</td>
<td>26 ±12</td>
<td>22 ±13</td>
</tr>
<tr>
<td>Have beef</td>
<td>28 ±15</td>
<td>13 ±11</td>
<td>0 ±10</td>
<td>35 ±15</td>
<td>16 ±11</td>
<td>22 ±15</td>
</tr>
<tr>
<td>Have dairy</td>
<td>59 ±24</td>
<td>32 ±23</td>
<td>0 ±0</td>
<td>0 ±0</td>
<td>3 ±5</td>
<td>28 ±22</td>
</tr>
</tbody>
</table>

Note: Farms may have more than one enterprise type (e.g., beef and sheep).

6.4 Away-wintering of sheep

Away-wintering is the process of removing livestock from upland sites during the winter. This can help to regenerate vegetation (such as heather) by reducing the impact of livestock over the winter period. They are most likely to be damaging (e.g., causing poaching on saturated soils or sheep browsing heather once grasses have stopped growing).
Away-wintering of sheep is practiced by 35% (±3%) of upland farmers with sheep, with some regional variation (Figure 6.9). Farmers in the Welsh Borders tend to be least likely to away winter sheep, possibly linked to the smaller moorland area in this region (Table 3.1). Farms that away-winter sheep are more likely to be mainly moorland (than better quality grazing), larger (in terms of economic size) or rent all of their land (Figure 6.10).

Figure 6.10: Proportion of upland sheep farmers that away-winter sheep

Those farmers that away-winter sheep were asked about their intentions for winter 2009/10. Three quarters (76% ±5%) indicated that they intended to keep numbers as they were in 2008/09. The remainder were equally split between increasing and decreasing numbers. There is insufficient data to provide a reliable comparison at a regional level. However, responses suggest that older farmers, those with smaller, part-time farms and those without an agri-environment agreement are more likely to reduce the number of sheep away-wintered (Figure 6.11).
Figure 6.11: Intended change in away-wintering of sheep in 2009/10 compared to 2008/09 (proportion of upland farmers that away-winter sheep)

6.5 Sheep breeds

Hill and upland breeds are more hardy and require less intervention than lowland and commercial breeds. The survey results suggest that the majority of upland sheep farmers (78% ±3%) do not intend to change their current breed mix over the next couple of years. Those in the Peak District are most likely to suggest that they will maintain their current breed mix (Figure 6.12). However, for those that indicated change, the results suggest that a greater proportion of upland sheep farmers intend to reduce numbers of traditional hardy hill breeds and crossed hill breeds than increase numbers (Table 6.6), although these differences are not statistically significant. It should be noted that these results do not give an indication of the likely changes in sheep numbers.
Figure 6.12: Proportion of upland sheep farmers intending to maintain current breed mix by upland region

Table 6.6 Percentage of those upland sheep farmers intending to change sheep numbers over the next couple of years by breed type

<table>
<thead>
<tr>
<th>Traditional hardy hill breeds</th>
<th>Crossed hill breeds</th>
<th>Non-hardy breeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase numbers</td>
<td>Reduce numbers</td>
<td>Increase numbers</td>
</tr>
<tr>
<td>23</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>±6</td>
<td>±7</td>
<td>±6</td>
</tr>
</tbody>
</table>

6.6 Summary

The key findings in this section are:

- Overall, 27% (±2%) of upland farms had some moorland, 54% (±3%) contained rough grazing and 86% (±2%) contained other better quality grassland.

- The majority of upland farms had not made any changes to their grazing levels in the last four years. However, where there had been change this was largely to reduce grazing. A greater proportion of farms have reduced their grazing on moorland compared to those with better quality grassland. This picture is mirrored at a regional level. The South West Moors had the greatest proportion of farms that had either reduced or stopped grazing moorland in the last 4 years.

- There is little evidence that those that have reduced or stopped grazing moorland have in turn increased their grazing on better quality grassland.

- Those reducing their level of moorland grazing were more likely to have an agri-environment agreement, to be classified as full time commercial or to be larger farms. Those stopping moorland grazing were more likely to be classified as part time commercial, to have an agri-environment agreement or to have common land.
Those intending to stop grazing moorland were most likely to be those for whom the farm is a hobby or lifestyle choice. Approximately one third also intend to reduce grazing levels on rough grazing and other grassland with the remainder largely intending to keep grazing levels about the same. Those intending to increase grazing on moorland are more likely to be part time commercial farms or to have ESA or CSS agreements.

Very few upland farms (7% ±2%) intended to change their enterprise mix over the next couple of years. Those with dairy cows were more likely to intend to change than those with beef cows or sheep.

Away-wintering of sheep is practiced by 35% (±3%) of upland farmers with sheep. Three quarters (76% ±5%) indicated that they do not intend to change the number they away-winter in 2009/10. The remainder were equally split between increasing and decreasing numbers.

The survey results suggest that the majority of upland sheep farmers (78% ±3%) do not intend to change their current breed mix over the next couple of years.
7. Moorland

7.1 Moorland management

The management of moorland determines the composition and abundance of the flora and fauna. There are various land management regimes but in addition to changes in grazing levels (see section 6) moorland farms were asked about four particular practices; environmental management agreements, grouse moor management and burning/cutting regimes (i.e. if managed by burning/cutting or not burnt/cut). It should be noted that there is insufficient data to separately present regional data for moorland within the Welsh Borders.

Environmental management agreements involve a prescription of regimes which should be of benefit to the area, in particular to enhance the biodiversity, and may also have a payment attached to them. Burning and cutting are used for a variety of purposes including the control of less desirable plants. Conducted efficiently, these practices can help to maintain the condition of heather moorland by providing a diverse age structure; younger growth is favoured by livestock whilst older growth provides shelter and nesting opportunities for birds. However, if these practices are not carried out appropriately they can damage sensitive habitats such as blanket bog and peat, an important carbon store, releasing carbon dioxide into the atmosphere.

Management of grouse moors has been considered as this is specifically concerned with the use of heather moorland. In order to support grouse, this habitat is burnt or cut on a rotational basis to provide heather at a range of stages. It may also have benefits for other breeding birds but it needs to be carefully managed for the reasons previously mentioned.

Environmental management agreements were held by 52% (±5%) of moorland farms, 31% (±5%) were managed by burning/cutting, 26% (±5%) were not burnt or cut and 23% (±4%) were managed for grouse shooting. Environmental management agreements were common in all regions (Figure 7.2), although less so in the North Yorkshire Moors and South Pennines. Management by burning/cutting was most common on farms in the North Yorkshire Moors and the South West Moors. The North Yorkshire Moors had the greatest proportion of farms where moorland is managed for grouse shooting whilst in the Lake District and South West Moors (regions with limited grouse populations30) there is little or no reported management for grouse shooting. The Lake District and the South Pennines had the greatest proportion of farms where moorland was not burnt or cut.

Many farms use a combination of methods to manage their moorland. For instance, cutting and burning practices are part of grouse moor management. It is therefore not surprising that 69% of farms that graze moorland managed for grouse shooting also indicated that their moorland was managed by burning/cutting (Table 7.1).

Figure 7.2: Moorland management by upland region (proportion of upland farms with moorland)

![Moorland management by upland region](image)

Table 7.1 Combinations of moorland management regimes (see note for interpretation)

<table>
<thead>
<tr>
<th></th>
<th>Part of an environmental management agreement</th>
<th>Not burnt or cut</th>
<th>Managed by burning / cutting</th>
<th>Managed for grouse shooting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of an environmental management agreement</td>
<td>-</td>
<td>20 ±6</td>
<td>36 ±7 ±4</td>
<td>24 ±5 ±3</td>
</tr>
<tr>
<td>Not burnt or cut</td>
<td>39 ±10</td>
<td>-</td>
<td>0 ±0 ±2</td>
<td>4 ±2 ±3</td>
</tr>
<tr>
<td>Managed by burning / cutting</td>
<td>60 ±10</td>
<td>0 ±0 ±2</td>
<td>-</td>
<td>51 ±9 ±7 ±2</td>
</tr>
<tr>
<td>Managed for grouse shooting</td>
<td>55 ±10</td>
<td>4 ±3 ±2</td>
<td>69 ±9 ±2 ±3</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Table should be interpreted as (for example) of those farms that were part of an environmental management agreement, 20% were not burnt or cut, 36% were also managed by burning/cutting and 24% were also managed for grouse shooting.

Further analysis suggests that larger full time commercial farms were more likely to have environmental management agreements and to be managed for grouse shooting than smaller, less commercial farms.

Whilst it is possible to focus on agri-environment schemes and moorland management, the results become less reliable due to the limited number of responses. Responses to this question may be more closely linked to local habitats and hence the regional profile than to specific agri-environment schemes, but are presented here for information (Figure 7.3).

31 28% ±6% of full time commercial farms had both environmental management agreements and were managed for grouse shooting compared with 8% ±9% of part time commercial farm.
7.2 Perceived changes to moorland

Those farms that grazed moorland were asked whether they had noticed any changes to moorland in the last four years. Changes in moorland vegetation and burning are important as these can indicate alterations to the land management regimes. For instance, an increase in scrub may be indicative of reduced land management or changes to grazing regimes. It should be emphasised that the responses to this question relate to perceptions of change. Perceived changes may relate to plant density, not necessarily changes in extent.

71% (±5%) of moorland farmers perceived some change to moorland over the last four years, ranging from almost all moorland farmers (97% ±6%) in the South West Moors, to 44% (±22%) in the South Pennines (Figure 7.5).

As noted, moorland farmers in the South West suggested the greatest indication of change. More than 80% perceived an increase in scrub or bracken (Figure 7.6), possibly linked to the changes in grazing noted over the same period. 44% (±17%) of moorland farmers in the South West Moors also perceived a reduction in heather (only 6% (±9%) had noticed more heather) and 61% (±16%) less burning of moorland in the last four years.

32 This region had the greatest proportion of farmers that reported having either stopped or reduced moorland grazing over the same period (section 6.1).
Figure 7.5: Proportion of moorland farmers noticing some changes on moorland in the last four years by region

Figure 7.6: Proportion of upland farmers noticing changes to scrub (top left), bracken (top right), heather (bottom left) or burning (bottom right) on moorland in the last four years by region
Moorland farmers in each region perceived an increase in scrub over the last four years, although less so in the North Yorkshire Moors and South Pennines. Very few suggested a reduction. Similarly, there were perceived increases in bracken reported in each region, although there were also reports of reductions in all regions except the South Pennines and South West Moors. Overall, this may suggest that bracken and scrub encroachment may be occurring to some extent in each of our upland regions particularly in the South West Moors.

However, particularly in the case of bracken, it is not clear whether the perceived change is related to density rather than coverage. Evidence from the Countryside Survey suggests that there was a small reduction in the extent of the Bracken33 broad habitat and a slight increase in the Dwarf Shrub Heath broad34 habitat in the English Uplands between 1998 and 2007, although neither change was statistically significant.

7.3 Summary

The key findings in this section are:

- Environmental management agreements were common in all regions (although less so in the North Yorkshire Moors and South Pennines). Management by burning/cutting was most common on farms in the North Yorkshire Moors and the South West Moors. The Lake District and the South Pennines had the greatest proportion of farms where the moorland was not burnt or cut. The North Yorkshire Moors had the greatest proportion of farms where the moorland is managed for grouse shooting.

- Bracken and scrub encroachment may be occurring to some extent in each upland region. 71% (±5%) of moorland farmers perceived some change to moorland over the last four years. This ranged from almost all moorland farmers (97% ±6%) in the South West Moors, to 44% (±22%) in the South Pennines. It should be noted that perceived changes may relate to plant density, not necessarily changes in extent.

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33 For an area to be included in the Bracken broad habitat within the Countryside Survey it must have 95-100% cover of bracken plants.
34 Dwarf Shrub Heath broad habitat is characterised by areas dominated by heather species and/or Bilberry. Heaths dominated by Western Gorse occur mostly in South West England.
8. **Rough grazing and other grassland management**

Rough grazing and other better quality grasslands will have differing land management to moorland. The survey collected information on changes in drain maintenance and (for better quality grasslands only) on changes in fertiliser and lime applications, both over the preceding four year period.

8.1 **Drain maintenance**

Appropriate field drainage can help to extend the grazing season, increase nutritional quality of grassland and reduce water-logging of soils.

77% (±4%) of upland farms with rough grazing have field drains compared to 85% (±3%) of those with other, better quality, grassland. A greater proportion of upland farms in the north of England have drains than in the Welsh Borders and the South West Moors (Figure 8.1). Of those farms with drainage, around 80% of farmers on both rough grazing and better quality grassland have not changed their level of maintenance in the last four years.

Figure 8.1: Proportion of upland farmers with rough grazing and/or better quality grassland that have field drains

At a national and regional level (Figure 8.2), the proportion of upland farmers increasing drain maintenance on rough grazing largely balances the proportion decreasing or ceasing maintenance. For other, better quality grassland, there is a greater tendency for the proportion of those decreasing or not maintaining their drains to outweigh the proportion increasing their level of maintenance, particularly in the North Pennines/Borders, Lake District and Yorkshire Dales/ Bowland.
8.2 Fertiliser and lime inputs on better quality grassland

8.2.1 Artificial fertilisers

Inorganic fertilisers are an important source of nutrient input on agricultural land although a considerable proportion also receives organic manures. Nutrient input, particularly nitrogen, is the biggest determinant of yield and also has major impacts on crop/sward structure and botanical composition. Nutrient losses to ground and surface waters can cause pollution affecting biodiversity (through eutrophication) and the quality of drinking water. Gaseous losses as ammonia and oxides of nitrogen also cause air pollution, contributing to eutrophication of sensitive habitats and climate change.

Artificial fertilisers are used by 83% (±3%) of upland farms with better quality grassland. This should not be confused with the area of land to which fertilisers are applied. The lower proportion using artificial fertilisers in the Peak District (Figure 8.3) can be explained, to some extent, by the relatively high frequency of farms that are a hobby or lifestyle choice in this region. These appear less likely to use fertilisers than full time commercial farms.

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35 Eutrophication occurs when compounds of phosphorus and nitrogen enter water bodies, resulting in excessive nutrients. This can lead to an imbalance in the growth of plants and algae, changing the water body’s composition.

36 18% (±4%) of upland farms in the Peak District were categorised as a hobby/lifestyle choice by the respondent compared to 10% (±1%) for all upland regions.
Figure 8.3: Proportion of upland farms with better quality grassland using artificial fertilisers by commercial status and region.

Figure 8.4: Change in use of artificial fertilisers on better quality grassland over previous four years (proportion of upland farms with better quality grassland that have used fertilisers) by economic size (top left), agri-environment agreement status (top left), type of livestock (bottom left) and tenure (bottom right)
65% (±4%) of upland farms (with better quality grassland) that have used artificial fertilisers indicated that they had made some change in their use over the last 4 years, almost all indicating a reduction or cessation in use. Change is least likely on farms with dairy cows and on farms classed as at least medium in terms of economic size. Those that have stopped using artificial fertilisers are more likely to have beef cattle or sheep than dairy cows, be classed as small or part time farms or to own all of their land.

8.2.2 Lime

Lime is used to neutralise soil acidity and to add calcium and magnesium to the soil to encourage health plant growth. Although regularly used on lowland soils, its use can be of limited economic benefit for many upland farms. Limed soils can help to maintain botanical diversity supporting not only the sown herbage species, typically perennial ryegrass and white clover, but also bentgrasses, fine fescues and herbaceous species which are intolerant of extreme acidity. However over-liming grassland can induce deficiencies of trace elements such as copper, cobalt and selenium which can adversely affect livestock growth (but not grass growth).

Figure 8.5: Proportion of upland farms with better quality grassland using lime by commercial status and region

[Bar chart showing the proportion of upland farms using lime by commercial status and region.]

Lime is applied by two thirds of upland farms with better quality grassland. It is used by a greater proportion of upland farmers with better quality grassland in the South West Moors than in other regions, potentially linked to the acidity of soils in this region. In general, full time commercial farms are more likely to apply lime than less commercial enterprises.

44% (±4%) of upland farms (with better quality grassland) that have used lime inputs indicated that they had made some change in their use over the last 4 years. 10% (±2%)

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37 “Lime and upland catchments”, Dr W A Adams, The University of Wales, Aberystwyth. [http://www.aglime.org.uk/environment02.htm](http://www.aglime.org.uk/environment02.htm)


39 20% of all land within the South West Moors region was classified as acid grassland by the Land Cover Map 2000 compared to 16% in the Lakes and Cumbrian Coast and 9% in the Borders/North Pennines and the Welsh Borders. If forests, bogs, inland waters, inland rock and built up areas are excluded, 26% of the remaining land in the South West Moors was classed as acid grassland compared to 19% of the Lakes and Cumbrian Coast and 12% of the Borders/North Pennines. Source: forthcoming Observatory Uplands report.
indicated an increase in use with the remainder indicating that they had either reduced their use (11% ±3%) or stopped (23% ±4%). Those most likely to have made a change tend to be small or part time farms, those with beef cattle or sheep (rather than dairy cows) or those with an agri-environment agreement (Figure 8.6).

Figure 8.6: Change in use of lime on better quality grassland over previous four years (proportion of upland farms with better quality grassland that have used fertilisers) by economic size (top left), agri-environment agreement status (top left), type of livestock (bottom left) and tenure (bottom right)

8.3 Summary

The key findings in this section are:

- 77% (±4%) of upland farms with rough grazing have field drains compared to 85% (±3%) of those with other, better quality, grassland.

- At a national and regional level (Figure 8.2), the proportion of upland farmers increasing drain maintenance on rough grazing balances those decreasing or ceasing maintenance. For other, better quality grassland, there is a greater tendency for the proportion of those decreasing or not maintaining their drains to outweigh...
those increasing their level of maintenance, particularly in the North Pennines/Borders, Lake District and Yorkshire Dales/Bowland.

- Artificial fertilisers are used by 83% (±3%) of upland farms with better quality grassland.

- 65% (±4%) of upland farms (with better quality grassland) that have used artificial fertilisers indicated that they had made some change in their use over the last 4 years, almost all indicating a reduction or cessation in use.

- Lime is applied by two thirds of upland farms with better quality grassland. Its use is more prevalent by farmers in the South West Moors than in other regions.

- 44% (±4%) of upland farms (with better quality grassland) that have used lime inputs indicated that they had made some change in their use over the last 4 years. 10% (±2%) indicated an increase in use with the remainder indicating that they had either reduced their use (11% ±3%) or stopped (23% ±4%). Those most likely to have made a change tend to be small or part time farms, those with beef cattle or sheep (rather than dairy cows) or those with an agri-environment agreement.
9 The future

There are many drivers for change in the uplands. These include:

- the decoupling of support in 2005 following the 2003 CAP reforms;
- changes in input and output prices;
- the replacement of Hill Farm Allowance (HFA) with a new strand of entry level Environmental Stewardship in July 2010 aimed specifically at the uplands, 'Uplands ELS';
- revised Nitrate Vulnerable Zone (NVZ) area requirements;
- anticipated Water Framework Directive (WFD) measures; and
- the current EU review of Less Favoured Areas (LFA).

It is therefore important to have a better understanding of farmers’ attitudes to the future.

9.1 Future of the farm business

The survey found that almost one third of upland farm businesses are expected to continue for at least 20 years. These farms (Figures 9.1 and 9.2) are more likely to have a farmer aged under 55 years, to have more than 100 ha of LFA land, to be run on a full time commercial basis, to be classified as “mainly moorland”, to have dairy cows, to be long established family farms, or to have succession secured (within the family).

However, 21% (±3%) of upland farm businesses are not expected to continue beyond the next five years. These farmers are more likely to be 55 years and over, to farm less than 100ha of LFA land, to farm mainly rough grazing or other grassland and to have no succession arrangements. Of those that do not expect the business to continue beyond the next 5 years, 61% (±8%) plan to retire, but 12% (±5%) “will do all that they can to stay in farming” and 23% (±7%) “will try to remain in farming”.

Figure 9.1: Proportion of upland farms that expect the farm business to continue for given time periods by age (left) and commercial status (right)
Succession appears to be a key factor for the future of the farm business. The survey also asked questions about cash flow, the ease of obtaining external finance to help run the farm business (Figure 9.3) and the greatest future challenges (Figure 9.4). Debt and the external
finance do not appear to be key factors - those upland farm businesses not expected to continue beyond the next 5 years were less likely to borrow than those expected to continue beyond the next 10 years and were no more likely to have had problems obtaining external finance. They were also no more likely to identify any of the specified main challenges than those who expected their farm business to continue for longer.

Figure 9.3: Proportion of upland farms that expect the farm business to continue for given time periods by perception of farm debt (left) and ease of obtaining external finance for those that borrow (right)

![Chart showing debt and finance]

Figure 9.4: Key challenges identified by upland farms by length of time the business is expected to continue (proportion of farms)

![Chart showing key challenges and time frames]

Note: Farmers could select more than one statement

9.2 Succession

As highlighted in the previous section, succession is a key factor in business continuity, particularly given the aging profile of farmers (Figure 9.5).
37% (±3%) of upland farmers have succession secured – almost entirely within the family. For those aged 65 and over (Figure 9.6), this rises to 48% (±6%) whilst for each of the remaining age groups around 30% have succession secured. Succession remains uncertain for 36% (±3%) of upland farmers whilst for 27% (±3%) there is no succession. The level of uncertainty declines with the age of the farmer but, for 21% (±5%) of those aged 65 and over, succession still remains uncertain.

Figure 9.6: Proportion of upland farmers by succession arrangements and by age (left), commercial status (right).

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40 Median age of holders in England derived from EC Farm Structure data. The holder is defined as the person who is legally and economically responsible for the farm. This may not always be the person that takes day to day responsibility for its running. The holder can own the farm outright or rent it or be a hereditary long term leaseholder or a usufructuary or a trustee.
Succession is more likely to be secured on those upland farms that are long established family farms, or where the farmer is aged 65 years and over, that farm more than 100ha of land in the LFA, or that have dairy cows. Those upland farms for which succession is uncertain are most likely to be those with smaller areas of LFA land and have younger farmers. Those upland farms with no succession are more likely to be older farmers or to have beef or sheep enterprises.

The uplands survey also collected further detail on the reasons for no succession. Farmers were asked to choose between “family do not see a future in farming”, “family not interested” or “no family”. Overall, the most common response was the first of these options, highlighted by 41% (±7%) of those with no succession arrangements followed by “family not interested” (31% ±6%) and “no family” (27% ±6%). Around a quarter (24% ±8%) of those aged 55 and over with no succession had no family to inherit the farm (Figure 9.8). Overall, this equates to 7% (±2%) of upland farmers in this age group.
Figure 9.8: Proportion of upland farmers with no succession by reason and age (left) and family farm status (right)

Note: There is insufficient data to present reliable results for those aged under 40 and non-family farms

9.3 Maintaining the upland way of life and the environment

Hill farming remains an important way of life in the English uplands, with almost 90% of farms being either long established or first generation family farms. The value of farming in the uplands cannot just be viewed in economic terms, and there is a need to better understand the motivations for farming in these more challenging locations.

Almost all upland farmers (95%) feel that maintaining the traditional upland way of life is either very important (60% ±3%) or important (35% ±3%). The remainder suggest that this is unimportant (3% ±1%) or that change would be a good thing (3% ±1%). The level of importance tends to decline as the quality of the grassland increases (Figure 9.9).

Figure 9.9 Importance of upland way of life by commercial status of farm (left) and quality of grassland (right) (expressed as proportion of upland farmers, legend applies to both charts)
82% (±3%) of upland farmers agree that maintaining the environment is vital to the future of upland farming and/or part of the process of upland farming. There were some regional differences in terms of the relative importance given to these two positive statements (Figure 9.10). However when the combined response for these two statements was considered, there were no significant differences between regions. Those least likely to agree with either of these statements, tended to be aged at least 65 or for whom the farm is a hobby/lifestyle choice.

Figure 9.10: Attitudes of upland farmers to maintaining the environment by region

Note: Farmers could select more than one statement

The Lake District, South West Moors and Peak District have the greatest proportions of farmers suggesting that maintaining the environment is making upland farming more difficult (Figure 9.10). As a whole, this group of farmers tend to be mainly moorland, more commercial, larger and with an agri-environment agreement (Figure 9.12). This latter finding is worth exploring in more detail. Those with ESA or ELS agreements were more likely to suggest that maintaining the environment is making upland farming more difficult than those with HLS or CSS agreements (Figure 9.11). This may help to explain the strength of this category in the Lake District, South West Moors and the Peak District – regions where there are still large areas under ESA agreements.

Figure 9.11: Attitudes of upland farmers to maintaining the environment by type of agri-environment agreement

41 Farmers could select more than one statement. 38% (±3%) selected maintaining the environment is vital to the future of upland farming and 53% (±3%) that maintaining the environment was part of the process of upland farming.
Figure 9.12: Attitudes of upland farmers to maintaining the environment by age (top left), type of grassland (middle left), commercial status (middle right), LFA area (bottom left) and whether the farm has an agri-environment agreement (bottom right). Legend for each graph (top right)
9.4 Challenges for the future and resilience

Farmers were asked to identify what they thought would be the greatest challenges for the future. Overall the most important challenges were seen to be market prices (76% ±3% of upland farmers), changes to Single Payment Scheme payments (65% ±3%), the impact of new regulations (65% ±3%), input costs (59% ±3%) and the level of environmental payments (47% ±3%). However, the importance of each of these challenges varied between groups or types of farmer (Figures 9.13 and 9.14).

Figure 9.13: Proportion of upland farms indicating the following greatest challenges for the farm by commercial status (top), LFA farmed area (bottom)

Those for whom the farm is a hobby or lifestyle choice were much less likely to select any of the options presented as their greatest challenge. Unfortunately there was no option available to respondents to record challenges other than those presented. The level of concern with each of the challenges presented tended to decline with the commercial status of the farm (particularly for input costs) and the LFA farm area.
Farms classed as "mainly moorland" were much more likely to see the level of environmental payments and the impact of new regulation as challenges than those with better quality grassland. Farms with dairy cows were less likely to see the level of environmental payments as a major challenge than those farms with beef cows or sheep - dairy farms will have better quality grassland and are more likely to be full time commercial farms.\(^{42}\)

Figure 9.14: Proportion of upland farms indicating the following greatest challenges for the farm by and quality of grassland (top) and livestock enterprise type (bottom)

Focussing on access to services (Figure 9.15), the survey found that the availability of skilled labour was of most concern in the Lake District (identified by 24% \(\pm 7\)% of upland farmers). Farmers in the North Yorkshire Moors and the South West Moors were most concerned about access to livestock markets.

\(^{42}\) The survey found that 93% of farms with a dairy enterprise were full time commercial businesses
Despite these challenges, 41% (±3%) of upland farmers indicated that they “will do all that they can to remain in farming” and 38% (±3%) “will try to remain in farming”. 19% (±3%) plan to retire and just 2% (±1%) are “thinking of leaving farming for another career”.

Of those aged 65 years and over (Figure 9.16), less than one third plan to retire, whilst 37% (±6%) plan to do all that they can to remain in farming and 31% (±6%) will “try to remain in farming”. Full time commercial farms, those with farmers under 40 years and those classified as “mainly moorland” are most likely to “do all that they can to remain in farming”. Those for whom the farm is a hobby/lifestyle choice are most likely to be planning to retire.\(^{43}\)

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\(^{43}\) 57% of those for which the farm is a hobby/lifestyle choice are aged 65 and over compared to 29% of part time commercial farms and 25% of full time commercial farms.
9.5 Summary

The key findings in this section are:

- Almost one third of upland farm businesses are expected to continue for at least 20 years. These farms are more likely to have a farmer aged under 55 years, or to have more than 100 ha of LFA land, or to be run on a full time commercial basis, or to be classified as “mainly moorland”, or to have dairy cows, or to be long established family farms or to have succession secured (within the family).

- 21% (±3%) of upland farm businesses are not expected to continue beyond the next five years. These farms are more likely to have a farmer aged 55 years and over, to farm less than 100 ha of LFA land, to be mainly rough grazing or other grassland or to have no succession arrangements with the latter appearing to be a key factor for the future of the farm business. Although these farms were also less likely to borrow than those expected to continue beyond the next 10 years they were no more likely to report problems obtaining external finance.

- 37% (±3%) of upland farmers have succession secured. Succession remains uncertain for 36% (±3%), whilst for 27% (±3%) there is no succession. The level of uncertainty declines with the age of the farmer but, for 21% (±5%) of those aged 65 and over, succession still remains uncertain. Around a quarter of those aged 55 and over with no succession had no family to inherit the farm.

- Almost all upland farmers (95%) feel that maintaining the traditional upland way of life is either very important (60% ±3%) or important (35% ±3%).

- 82% (±3%) of upland farmers agree that maintaining the environment is “vital to the future of upland farming” and/or “part of the process of upland farming”. Those least likely to agree with either of these statements, tended to be at least 65 years or for whom the farm is a hobby/lifestyle choice.
The most important challenges for upland farmers were market prices (76% ±3% of upland farmers), changes to Single Payment Scheme payments (65% ±3%), the impact of new regulations (65% ±3%), input costs (59% ±3%) and the level of environmental payments (47% ±3%). Farms classed as “mainly moorland” were much more likely to see the level of environmental payments and the impact of new regulations as challenges than those with better quality grassland.

Despite these challenges, 41% (±3%) of upland farmers indicated that they “will do all that they can to remain in farming” and 38% (±3%) “will try to remain in farming”. 19% (±3%) plan to retire and just 2% (±1%) are “thinking of leaving farming for another career”. Of those aged 65 years and over, less than one third plan to retire, whilst 37% (±6%) plan to do all that they can to remain in farming and 31% (±6%) will try to remain in farming.
### Appendix 1: The National Character Areas included within each upland region

<table>
<thead>
<tr>
<th>Upland Region</th>
<th>NCAs Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borders</td>
<td>Border Moors and Forests, Cheviot Fringe, Cheviots Mid</td>
</tr>
<tr>
<td></td>
<td>Northumberland, Northumberland Sandstone Hills Solway Basin,</td>
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<tr>
<td></td>
<td>Tyne Gap and Hadrian's Wall</td>
</tr>
<tr>
<td>Bowland</td>
<td>Bowland Fells, Bowland Fringe and Pendle Hill</td>
</tr>
<tr>
<td>Cumbrian Coast</td>
<td>Morecambe Bay Limestones, West Cumbria Coastal Plain</td>
</tr>
<tr>
<td>Dartmoor / Bodmin Moor</td>
<td>Bodmin Moor, Dartmoor, South Devon</td>
</tr>
<tr>
<td>Exmoor</td>
<td>Exmoor, Quantock Hills</td>
</tr>
<tr>
<td>Lakes</td>
<td>Cumbria High Fells, Howgill Fells, Orton Fells, South Cumbria Low Fells</td>
</tr>
<tr>
<td>North Pennines</td>
<td>Durham Coalfield Pennine Fringe, Eden Valley, North Pennines</td>
</tr>
<tr>
<td>NYM</td>
<td>Howardian Hills, North Yorkshire Moors and Cleveland Hills, Tees Lowlands,</td>
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<tr>
<td></td>
<td>Vale of Mowbray</td>
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<tr>
<td>Peak District</td>
<td>Dark Peak, Derbyshire Peak Fringe and Lower Derwent,</td>
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<tr>
<td></td>
<td>Needwood and South Derbyshire Claylands, Nottinghamshire</td>
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<tr>
<td></td>
<td>Derbyshire and Yorkshire Coalfield, Potteries and Churnet Valley,</td>
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<tr>
<td></td>
<td>South West Peak, White Peak, Yorkshire Southern Pennine Fringe</td>
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<tr>
<td>South Pennines</td>
<td>Lancashire Valleys, Manchester Pennine Fringe, Southern Pennines</td>
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<tr>
<td>SW lowlands</td>
<td>Carmmenellis, Cornish Killas, Devon Redlands, Hensbarrow, The Culm, The Lizard, West Penwith</td>
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<tr>
<td>Welsh Borders</td>
<td>Black Mountains and Golden Valley, Clun and North West</td>
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<tr>
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<td>Herefordshire Hills, Oswestry Uplands, Shropshire Hills,</td>
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<td></td>
<td>Shropshire, Cheshire and Staffordshire Plain, South Herefordshire</td>
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<tr>
<td></td>
<td>and Over Severn</td>
</tr>
<tr>
<td>Yorkshire Dales</td>
<td>Pennine Dales Fringe, Yorkshire Dales</td>
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</tbody>
</table>

Note: Only those areas falling within the LFA were included in the survey.