

## **CHAPTER 2**

### **METHODS USED TO PREPARE INVENTORIES FOR A GROUP OF NON-FARMING, LAND-BASED ACTIVITIES THAT CONTRIBUTE TO THE RURAL ECONOMY OF THE SCOTTISH BORDERS**

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## **2. METHODS USED TO PREPARE INVENTORIES FOR A GROUP OF NON-FARMING, LAND-BASED ACTIVITIES THAT CONTRIBUTE TO THE RURAL ECONOMY OF THE SCOTTISH BORDERS**

### **Background**

**2.1** The list of land-based activities covered by the Study confirms expectations. They represent the range of the land uses that traditionally have been pursued, in addition to commercial agriculture and forestry. Not all of them either can be or are regarded as being commercially viable in their own rights (i.e. falconry and substantial sections of both grouse shooting, deer stalking and fox hunting). However, it was evident that they shared three elements in common, namely:

- they depended upon sustained management of natural resources; moreover
- all were based in the countryside. To that extent they represented activities that were variously supplementary and complementary to, but, almost always, additional to farming and forestry (e.g. countryside-based tourism and recreation);
- they involved expenditure which impacted positively on the local economy.

**2.2** Whilst the Study may be thought to cover familiar ground, a strong novelty element prevailed throughout. No known published inventories, covering the Borders Region, previously existed for several of the activities. This applied in the case of lowland game shooting, grouse shooting, deer stalking and falconry. The same was true of the surveys of the main trade and service organisations that were known to be closely associated with one or more of the activities. In these respects the Study broke 'virgin ground'. Even those activities previously surveyed in the Borders (i.e. countryside-based tourism, angling and fox-hunting), were on this occasion subjected to more comprehensive scrutiny than hitherto. Indeed, the status of both of the earlier surveys undertaken into angling and fox hunting had been regarded as 'preliminary'.

### **Methodology**

**2.3** As in the case of most inventories, the chosen activities have been surveyed. The methods used have involved literature searches, consultations with local experts and a variety of surveys. Most frequently the latter have entailed the use of postal questionnaires, accompanied by full briefing notes and reply-paid envelopes. In other cases, involving relatively small samples, telephone interviews have been conducted (i.e. main supporting trade and service organisations, the owners/managers of falconry centres and, in the case of fox

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hunting, foot/car and bike-borne followers). In just one case, in order to investigate the validity of the results of a survey, investigations were conducted by a combination of correspondence, telephone conversation and structured interviews (i.e. deer stalking).

- 2.4** In the case of a few other activities, a census of the full populations of providers was undertaken. This approach was adopted where the total populations were not unduly large and where it was considered important to obtain, for a particular period of time (year or sporting season), as comprehensive a record as possible. The inventories of the providers of angling, fox hunting, and grouse shooting (on both the Lammermuirs and the Central Southern Uplands) owners were compiled in this way. The same applied in the case of the mounted participants of fox hunts, whose names appeared on the respective hunt lists of subscribing members.
- 2.5** Where the sizes of the total populations were so large as to prohibit accessing them in full, on the grounds of the expense and the time-consuming nature of the survey and subsequent analyses involved, sample surveys were undertaken. This applied in the case of farmers concerning diversification practices, as well as the participants involved in shooting, stalking and falconry activities.
- 2.6** Through the inputs of the Study Team's Statistical Adviser, great care was taken to ensure that the samples were both representative of all of the main components of the 'parent' populations and randomly selected. Throughout, the aim was to minimise statistical bias, in the interests of obtaining reliable estimates
- 2.7** Expert Advice was sought both in designing the survey questionnaires and in identifying the total populations to be covered by the censuses and sample surveys. At the end of each Chapter a full list of the experts consulted is provided.
- 2.8** **Box 2.1** summarises the numbers and types of surveys conducted and the response rates achieved. It reveals that 16 surveys, in total, were undertaken to prepare the inventories. These comprised two main types of survey, namely:
- postal questionnaires (12 Postal Questionnaires);
  - structured interviews, conducted by telephone (4 surveys).
- 2.9** **Boxes 2.2 and 2.3** summarise the methods used respectively in surveying the populations of Providers and Participants of each land-based activity. Full descriptions of the methodologies used are provided as parts of the Chapters describing each of the inventories prepared during the Study. **Box 2.4** provides corresponding information in the case of the surveys conducted into the main trade and service organisations.

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## **Main Components of the Surveys**

**2.10** The main parameters, for which the surveys were designed to provide data respectively covering the Providers, the Participants and the main Local Trades and Service Organisations involved, are listed below:

- ❑ Physical Features of the Activity;
- ❑ The Frequency of the Activity;
- ❑ The Financial Features: Revenues, Recurrent and Capital Costs;
- ❑ The Levels of Direct Employment Generated/Sustained;
- ❑ The Indirect/Secondary Financial and Employment Impacts, including economic leakages.

**2.11** Naturally the coverage of individual topics addressed by each of the surveys differed to reflect the chief characteristics and features of the particular activity under scrutiny. However, in generic terms, there were close similarities between the surveys in terms of the physical and financial parameters covered.

## **Procedures for Sampling and Aggregation**

**2.12** The representative nature of the sampling approach adopted was essential in ensuring that the aggregation or ‘grossing-up’ of the survey results yielded reliable estimates for the total populations. The process adopted for ‘grossing-up’ entailed making assumptions about the sections of the total populations that either did not respond to the survey or were not part of the random samples. On practical grounds, it was assumed that the responses of these sections of the populations would fall somewhere in the following range of estimates for the various features covered by the survey, namely:

- ❑ the estimates would be identical to the average of the responses received from those who returned completed questionnaires;
- ❑ the estimates would be 50% lower than the average response obtained from the respondents.

**2.13** Such aggregation procedures are standard amongst professional market research practitioners.

## **Caveats**

**2.14** Whilst the surveys and analyses outlined above were conducted with essential statistical rigour, the consultants were well aware of the limitations of information obtained by the use of such survey methods. As is well

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recognised within the market research profession, errors may exist, for several reasons, including the fact that:

- ❑ the respondents replied to questions about activities, which had taken place twelve or more months previously;
- ❑ the majority of the respondents relied upon memory rather than carefully-kept records and accounts;
- ❑ only expenditures, involving cash transactions, were reported on the questionnaires; to the extent that inputs-in-kind, involving for example personal labour, were excluded from the responses. Thus the latter represented under-estimates.

**2.15** The questionnaire responses and analyses were cross-checked and scrutinised for obvious errors. Careful verification of the results was also undertaken through consultation with local experts. As a result, the consultants are overall confident that the results exclude any major attempts either to mis-inform BFRS or to distort the results of the component surveys.

**2.16** In the unlikely event of any anomalies being subsequently identified, they will need to be resolved through subsequent survey work. In order to serve as helpful strategic planning and management tools, the inventories will need to be regularly up-dated.

### **Concluding Comment**

**2.17** The caveats notwithstanding, the consultants consider that the estimates presented in each of the inventories will provide a sound basis upon which to review the Countryside Management Industry and to plan its future strategic and sustained development.

**BOX 2.1: THE NUMBERS AND TYPES OF COUNTRYSIDE RECREATION & SPORTS SURVEYS CONDUCTED & THE RESPONSE RATES ACHIEVED**

Type of survey	Number of surveys Conducted	Total population invited to participate in the surveys	Number of responses received	Response rate achieved: (rounded) %
<u>Postal Questionnaire Surveys</u>	12	1,821	668	<b>37</b>
Of which:				
Providers	(6)	(597)	(228)	<b>(38)</b>
Participants)	(6)	(1,224)	(440)	<b>(36)</b>
<u>Telephone Interviews</u>	4	155	150	<b>97</b>
<b>TOTAL</b>	<b>16</b>	<b>1,935</b>	<b>818</b>	<b>42</b>

**BOX 2.2: SUMMARY OF THE SURVEY METHODS ADOPTED IN PREPARING THE INVENTORIES OF COUNTRYSIDE TOURISM, RECREATION & SPORTS PROVIDERS**

Inventories	Survey Method Adopted	Size of Survey Population	Survey Responses Received	Survey Response Rate
		No.	No.	
1. Tourism Providers	Postal Questionnaire	<b>260 (90 Farm Based)</b>	<b>57 (16)</b>	<b>22% (18%)</b>
2. Angling Providers	Postal Questionnaire	<b>125</b>	<b>67</b>	<b>54%</b>
3. Lowland Game Shooting Providers	Postal Questionnaire	<b>135</b>	<b>57</b>	<b>42%</b>
4. Grouse Shooting Providers (2 separate Surveys of the owners of the Lammermuirs and Central Southern Uplands Estates)	Postal Questionnaire	<b>27</b>	<b>16</b>	<b>59%</b>
5. Deer Stalking Providers	Postal Questionnaire	<b>43</b>	<b>24</b>	<b>56%</b>
6. Fox Hunting Providers	Postal Questionnaire	<b>7 Hunts (100% of the total population)</b>	<b>7 Hunts</b>	<b>100%</b>

**BOX 2.3: SUMMARY OF THE SURVEY METHODS ADOPTED IN PREPARING THE INVENTORIES OF COUNTRYSIDE TOURISM, RECREATION & SPORTS PARTICIPANTS**

<b>Inventories</b>	<b>Survey Method Adopted</b>	<b>Size of Survey Population No.</b>	<b>Survey Responses Received No.</b>	<b>Survey Response Rate</b>
<b>1. Lowland Game Shooting Participants</b>	Postal Questionnaire	<b>360</b>	<b>80</b>	<b>22%</b>
<b>2. Grouse Shooting Participants</b>	Postal Questionnaire	<b>90</b>	<b>57</b>	<b>63%</b>
<b>3. Deer Stalking Participants</b>	Postal Questionnaire	<b>279</b>	<b>25</b>	<b>9%</b>
<b>4. Fox Hunting Mounted Participants</b>	Postal Questionnaire	<b>391 Subscriber Households (100% of the total population)</b>	<b>207 Subscriber Households</b>	<b>53%</b>
<b>5. Fox Hunting Non-Mounted Participants</b>	Telephone Interview	<b>61 Foot/Car &amp; Bike- Borne Followers</b>	<b>61 Foot/Car &amp; Bike- Borne Followers</b>	<b>100%</b>
<b>6. Falconer Participants</b>	Postal Questionnaire	<b>43</b>	<b>10</b>	<b>23%</b>

**BOX 2.4: SUMMARY OF THE SURVEY METHODS ADOPTED IN UNDERTAKING SURVEYS OF THE MAIN TRADE & RELATED ORGANISATIONS INVOLVED IN SERVICING COUNTRYSIDE RECREATION AND SPORTS PROVIDERS & PARTICIPANTS**

<b>Inventories</b>	<b>Survey Method Adopted</b>	<b>Size of Survey Population</b>	<b>Survey Responses Received</b>	<b>Survey Response Rate</b>
		<b>No.</b>	<b>No.</b>	
<b>1. Angling Trades &amp; Service Organisations</b>	Telephone Interview	<b>10 net of business closures</b>	<b>8</b>	<b>80%</b>
<b>2. Shooting Trades &amp; Service Organisations</b>	Telephone Interview	<b>27</b>	<b>27</b>	<b>100%</b>
<b>3. Hunting Trades &amp; Service Organisations</b>	Telephone Interview	<b>57</b>	<b>54</b>	<b>94%</b>