

Quality Report:

Survey of Round Fencing Manufacturers

Introduction

The survey of round fencing manufacturers (or fencing survey) is one of a series of annual surveys and data requests used to produce statistics on the UK timber industry. The survey is run by Forest Research (in association with Forest Service) to collect data from round fencing manufacturers (or mills) in the UK that are believed to use UK-grown roundwood.

The survey comprises a short questionnaire that is sent to around 60 mills.

The list of mills covered by the survey is maintained by Forest Research and is updated regularly, following consultations with the Expert Group on Timber and Trade Statistics and others, to add new mills and remove those that have closed.

Relevance

The fencing survey requests data annually from all round fencing manufacturers in the UK that are believed to use UK-grown roundwood. It asks for data on consumption of roundwood, woodfuel use & sales, certification and total employment.

Figures on consumption of UK-grown roundwood from the fencing survey are combined with data from other sources to produce estimates of total deliveries of UK-grown roundwood.

Estimates are made for non-respondents by rolling forward data from previous years for these mills.

The main uses of the survey of round fencing manufacturers include:

- Trends in the supply of, and demand for, UK grown timber are monitored by the Forestry Commission, the UK timber industry and others;
- Deliveries of roundwood in the UK are provided to international organisations (Eurostat, UNECE, FAO and others) as part of the Joint Forest Sector Questionnaire (covering wood production and trade).

The Expert Group on Timber and Trade Statistics (EGTTS), comprising representatives from the UK timber industry, the Forestry Commission, Natural Resources Wales and Forest Service are consulted regularly to ensure that UK wood production and trade statistics remain relevant to users (details on the EGTTS can be found at www.forestry.gov.uk/forestry/infd-5rabj3).

Accuracy

As the survey approaches all relevant businesses, there are no sampling errors. There are, however, a number of non-sampling errors associated with this survey, related to errors of coverage, measurement, processing and non-response. The following tables provide an indication of the response rates (overall and for key items), level of imputed values and the editing rate, to assist users in understanding the quality of the data.

Unit response rates

Survey response rates for 2016, by size of mill and by country are provided in tables 1 and 2 below. The overall response rate to the fencing survey in 2016 was 41% of mills. The weighted response rate (taking account of the total roundwood consumption of each mill) was 47%. The relatively low weighted response rates indicate that non-response to the survey is likely to have a significant impact on the accuracy of the results.

Table 1: Survey response rates by size of mill, 2016

Size of mill (total production) ¹	Number of respondents	Number of non respondents	Total mills	Response rate (unweighted) ²	Response rate (weighted) ³
< 1	5	13	18	28%	28%
1 - < 5	7	9	16	44%	48%
5 - < 10	6	5	11	55%	48%
10 +	3	3	6	50%	51%
All mills	21	30	51	41%	49%

Notes:

1. Size categories are based on total roundwood consumption (softwood and hardwood), in thousand green tonnes.
2. Survey response rates reported here are calculated as the number of returns (full or partial) divided by the number of returns (full or partial) + number of non-respondents. Nil returns (e.g. where mills have closed) are excluded from this calculation.
3. Weighted by total roundwood consumption (softwood and hardwood).

Table 2: Survey response rates by country, 2016

Country	Number of respondents	Number of non respondents	Total mills	Response rate (unweighted) ¹	Response rate (weighted) ²
England	7	16	23	30%	43%
Wales	3	6	9	33%	34%
Scotland	5	8	13	38%	28%
Northern Ireland	6	0	6	100%	100%
All mills	21	30	51	41%	49%

Notes:

1. Survey response rates reported here are calculated as the number of returns (full or partial) divided by the number of returns (full or partial) + number of non-respondents. Nil returns (e.g. where mills have closed) are excluded from this calculation.
2. Weighted by total roundwood consumption (softwood and hardwood).

Key item response rates

Table 3 presents the response rates for the following key items: total consumption, total employment and certified input (for those with a Chain of Custody certificate). These item response rates are restricted to respondents to the survey. The high response rates indicate that item non-response has very little impact on the accuracy of the results for key items.

Table 3: Key item response rates, 2016

Key item	Response	Non response	Total	Response rate (unweighted) ¹	Response rate (weighted) ²
Consumption	20	1	21	95%	100%
Employment	20	1	21	95%	99%
Certified input ³	14	0	14	100%	100%

Notes:

1. Unweighted item response rate is the number of responses to that item divided by total respondents.
2. Weighted by total estimated value of key item.
3. Item only requested from mills with Chain of Custody certificate.

Total contribution to key items from imputed values

In compiling results from the survey of round fencing manufacturers, values are imputed to estimate for non-response (either to specific questions or to the entire survey). Values for survey non-respondents are imputed by rolling forward the values for that mill in the previous year. For item non-response, imputed values will also take account of responses to the rest of the survey.

Table 4 presents the percentage of the total value that is imputed for the following key items: total consumption, total employment and certified input (for those with a Chain of Custody certificate). The relatively high imputation rates indicate that imputing is likely to have a significant impact on the accuracy of the results.

Table 4: Total contribution to key items from imputed values, 2016

Key item	Imputed	Not imputed	Total	% imputed
Consumption (thousand green tonnes)	154	149	303	51%
Employment (full-time equivalents)	208	236	444	47%
Certified input (thousand m ³) ¹	99	119	218	46%

Notes:

1. Item only requested from mills with Chain of Custody certificate.

Editing rate for key items

The responses received to the survey are checked to ensure that the values provided to questions are consistent with each other and with previous responses from the same mill. Where there are clear inconsistencies that cannot be explained, values are revised to a more realistic level.

Table 5 presents the percentage of mills for which a value was edited for the following key items: total consumption, total employment and certified input (for those with a Chain of Custody certificate).

Table 5: Editing rate for key items, 2016

Key item	Value corrected	Value uncorrected	Total	Editing rate
Consumption	0	20	20	0%
Employment	4	16	20	20%
Certified input ²	0	14	14	0%

Notes:

1. Results on employment and certified input will not be released until September. At this stage limited data checking and analysis has been undertaken on these items.
2. Item only requested from mills with Chain of Custody certificate.

Timeliness and punctuality

Provisional results from the survey of round fencing manufacturers are published in *UK Wood Production and Trade: provisional figures* in mid-May, 4.5 months after the end of the reference period (calendar year).

Final results are published in *Forestry Statistics* at end September, 9 months after the end of the reference period (calendar year).

Accessibility and clarity

The annual *Forestry Statistics* publication, available on the Forestry Commission website at www.forestry.gov.uk/statistics provides the most comprehensive results from the fencing survey, including background information on the data collected, response rates, methodology, revisions and reporting. *Forestry Statistics* is published in line with the Forestry Commission's website accessibility statement.

Longer time series data, providing additional breakdowns for some statistics, are published in accompanying tables to *UK Wood Production and Trade: provisional figures*. Longer time series are also available for *Forestry Statistics*. Excel and PDF versions of all tables in *UK Wood Production and Trade: provisional figures* and *Forestry Statistics* are available to download from the Forestry Commission website.

Summary results are also published in *Forestry Facts & Figures*.

Comparability

The survey of round fencing manufacturers has been run annually by the Statistics team in the Forestry Commission since 1994. Results for a 10 year period are published in *Forestry Statistics*.

A number of refinements have been made to the survey, in response to consultation with the Expert Group on Timber and Trade Statistics and suggestions/issues raised by users and data providers. These include the addition of new data items (woodfuel sales & use from the 2008 survey, total employment from the 2008 survey, round fencing production & production of other products from the 2010 survey).

Coherence

Data on UK softwood deliveries (obtained from the survey of round fencing manufacturers and other surveys and data requests) are compared with estimates of total UK softwood removals (obtained from Forestry Commission/Natural Resources Wales/Forest Service administrative systems and the Forestry Commission's Private Sector Softwood Removals Survey), available in the annual *Forestry Statistics* publication.

Revisions

The Forestry Commission's Revisions Policy outlines our general approach to revisions.

The statistics for softwood round fencing manufacture are subject to annual revision, as information becomes available about mills opening or closing, or new information becomes available for previous non-respondents. The most common revisions are relatively small downward changes, as late information is incorporated about mill closures.

Other issues related to quality

Statistical disclosure control checks are run on the survey of round fencing manufacturers annually, prior to publication, to ensure that the results to be released are not likely to be disclosive for individual businesses.

Sheila Ward / Penelope Donohue
IFOS –Statistics
Forest Research
Updated September 2017