

## 11 Table T11 – Wood removals and value of removals

### 11.1 FRA 2010 Categories and definitions

| Category                      | Definition   |
|-------------------------------|--|
| Industrial roundwood removals | The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel). |
| Woodfuel removals             | The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.                |

### 11.2 National data

#### 11.2.1 Data sources

| References to sources of information         | Quality (H/M/L) | Variable(s) | Year(s)      | Additional comments                                  |
|--|-----------------|-------------|--------------|--|
| JQ1 (and previous TB1) international returns | M               | All         | 1988 to 2007 | Updated to include JQ1 data submitted in 2008        |
| Economic Accounts for Forestry               | M               | All         | 1988 to 2007 | UK working sheets for 1998 and 2002, for unit values |

#### 11.2.2 Classification and definitions

| National class | Definition  |
|----------------|---|
| Removals       | Removals of timber, mostly estimated from reported deliveries to wood processing industries |

#### 11.2.3 Original data

Removals 1988-1992 (000 m3 underbark)

|                       | 1988        | 1989        | 1990        | 1991        | 1992        | Ave 98-02   | 1992 r      |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total removals</b> | <b>5792</b> | <b>6273</b> | <b>6275</b> | <b>6352</b> | <b>6383</b> | <b>6215</b> | <b>6546</b> |
| Softwood removals     | 4806        | 5143        | 5291        | 5376        | 5699        | 5263        | 5859        |
| Hardwood removal      | 986         | 1131        | 984         | 976         | 684         | 952         | 687         |
| <b>Woodfuel</b>       | <b>197</b>  | <b>229</b>  | <b>229</b>  | <b>229</b>  | <b>229</b>  | <b>223</b>  | <b>232</b>  |
| Softwood woodfuel     | 79          | 98          | 98          | 98          | 98          | 94          | 100         |
| Hardwood woodfuel     | 118         | 131         | 131         | 131         | 131         | 129         | 132         |
| <b>Sawlogs</b>        | <b>3331</b> | <b>3657</b> | <b>3638</b> | <b>3483</b> | <b>3438</b> | <b>3509</b> | <b>3561</b> |
| Softwood sawlogs      | 2856        | 3044        | 3121        | 2925        | 3135        | 3016        | 3255        |
| Hardwood sawlogs      | 475         | 613         | 517         | 558         | 303         | 493         | 306         |

Source: 1988 to 1992 from TB1 and related databases in 1994; 1992r from JQ1/TB1 database in 2001.

**Removals 1998-2002 (000 m3 underbark)**

|                       | 1998         | 1999         | 2000         | 2001         | 2002         | Ave<br>98-02 |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total removals</b> | <b>7,595</b> | <b>7,774</b> | <b>7,791</b> | <b>7,881</b> | <b>7,789</b> | <b>7766</b>  |
| Softwood removals     | 6,968        | 7,184        | 7,219        | 7,328        | 7,247        | 7189         |
| Hardwood removal      | 627          | 590          | 572          | 553          | 542          | 577          |
| <b>Fuelwood</b>       | <b>229</b>   | <b>229</b>   | <b>229</b>   | <b>229</b>   | <b>229</b>   | <b>229</b>   |
| Softwood fuelwood     | 98           | 98           | 98           | 98           | 98           | 98           |
| Hardwood fuelwood     | 131          | 131          | 131          | 131          | 131          | 131          |
| <b>Sawlogs</b>        | <b>4295</b>  | <b>4570</b>  | <b>4570</b>  | <b>4675</b>  | <b>4735</b>  | <b>4569</b>  |
| Softwood sawlogs      | 4072         | 4372         | 4396         | 4515         | 4593         | 4390         |
| Hardwood sawlogs      | 223          | 198          | 174          | 160          | 142          | 179          |

Source: current JQ1 database

**Removals 2003-2007 (000 m3 underbark)**

|                       | 2003        | 2004        | 2005        | 2006        | 2007        | Ave<br>03-07 |
|-----------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Total removals</b> | <b>8073</b> | <b>8325</b> | <b>8524</b> | <b>8430</b> | <b>9018</b> | <b>8474</b>  |
| Softwood removals     | 7581        | 7877        | 8005        | 8047        | 8632        | 8028         |
| Hardwood removal      | 492         | 448         | 519         | 383         | 386         | 446          |
| <b>Fuelwood</b>       | <b>229</b>  | <b>229</b>  | <b>317</b>  | <b>317</b>  | <b>459</b>  | <b>310</b>   |
| Softwood fuelwood     | 98          | 98          | 98          | 98          | 196         | 118          |
| Hardwood fuelwood     | 131         | 131         | 219         | 219         | 263         | 193          |
| <b>Sawlogs</b>        | <b>4935</b> | <b>5086</b> | <b>5046</b> | <b>5313</b> | <b>5715</b> | <b>5219</b>  |
| Softwood sawlogs      | 4814        | 5006        | 4983        | 5257        | 5657        | 5117         |
| Hardwood sawlogs      | 121         | 80          | 63          | 56          | 58          | 76           |

Source: current JQ1 database

**Average unit values for sales from Forestry Commission direct working  
(Financial years ending March, £/m<sup>3</sup>)**

| £/m <sup>3</sup> underbark | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | Average<br>88-89 to<br>92-93 |
|----------------------------|---------|---------|---------|---------|---------|------------------------------|
| C Sawlogs                  | 35.55   | 36.79   | 38.33   | 32.94   | 31.93   | 35.11                        |
| C pulpwood / chipwood      | 15.30   | 16.22   | 20.80   | 21.23   | 20.23   | 18.75                        |
| Firewood                   | 12.64   | 12.77   | 12.89   | 13.01   | 13.11   | 12.88                        |

Source: working sheets for Economic Accounts for Forestry, 1998

| £/m <sup>3</sup> standing volume | 1998-99 | 1999-2000 | 2000-01 | 2001-02 | 2002-03 | Average<br>98-99 to<br>02-03 |
|----------------------------------|---------|-----------|---------|---------|---------|------------------------------|
| C Sawlogs                        | 26.17   | 23.98     | 23.86   | 22.87   | 21.84   | 23.74                        |
| C pulpwood / chipwood            | 19.43   | 17.49     | 16.78   | 16.59   | 16.25   | 17.31                        |
| Firewood                         | 11.02   | 11.96     | 10.88   | 18.05   | 12.28   | 12.84                        |

Source: Forest Enterprise harvesting & marketing data, in working sheets for Economic Accounts for Forestry, 2002 + update

| £/m <sup>3</sup> standing volume | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | Average<br>03-04 to<br>07-08 |
|----------------------------------|---------|---------|---------|---------|---------|------------------------------|
| C Sawlogs                        | 21.20   | 21.46   | 21.88   | 22.13   | 26.44   | 22.62                        |
| C pulpwood / chipwood            | 15.60   | 14.65   | 14.77   | 14.73   | 15.19   | 14.99                        |
| Firewood                         | 11.83   | 12.92   | 13.02   | 13.36   | 13.03   | 12.83                        |

Source: Forest Enterprise harvesting & marketing data, as above.

### 11.3 Analysis and processing of national data

#### 11.3.1 Estimation and forecasting

Scaling up 1988-2002 by ratio of 1992r to original 1992, and from underbark to overbark  
**Estimation for 1990**

|                       | 1988 to<br>1992 ave<br>ub | 1992r/<br>1992 | Overbark/<br>underbark | Ave<br>1988-1992<br>ob | Unit<br>value<br>£ | Total value<br>£m |
|-----------------------|---------------------------|----------------|------------------------|------------------------|--------------------|-------------------|
| <b>Total removals</b> | <b>6215</b>               |                |                        | <b>7157</b>            |                    | <b>178.0</b>      |
| Softwood removals     | 5263                      |                |                        | 6063                   |                    |                   |
| Hardwood removal      | 952                       |                |                        | 1094                   |                    |                   |
| <b>Woodfuel</b>       | <b>223</b>                |                |                        | <b>256</b>             | <b>11.50</b>       | <b>2.9</b>        |
| Softwood woodfuel     | 94                        | 1.018          | 1.120                  | 108                    |                    |                   |
| Hardwood woodfuel     | 129                       | 1.006          | 1.143                  | 148                    |                    |                   |
| <b>Sawlogs</b>        | <b>3509</b>               |                |                        | <b>4077</b>            | <b>31.35</b>       | <b>127.8</b>      |
| Softwood sawlogs      | 3016                      | 1.038          | 1.120                  | 3507                   |                    |                   |
| Hardwood sawlogs      | 493                       | 1.010          | 1.143                  | 569                    |                    |                   |
| <b>All others</b>     | <b>2483</b>               |                |                        | <b>2824</b>            | <b>16.74</b>       | <b>47.3</b>       |
| All others softwood   | 2153                      | 1.015          | 1.120                  | 2448                   |                    |                   |
| All others hardwood   | 330                       | 0.996          | 1.143                  | 376                    |                    |                   |

Source: Unit values from Forestry Commission sales (averages over 5 financial years), divided by 1.12 to convert from underbark to overbark unit values.

#### Estimation for 2000

|                       | Ave<br>1998-2002<br>ub | Overbark/<br>underbark | Ave<br>1998-2002<br>ob | Unit value<br>£ | Total<br>value<br>£m |
|-----------------------|------------------------|------------------------|------------------------|-----------------|----------------------|
| <b>Total removals</b> | <b>7766</b>            |                        | <b>8711</b>            |                 | <b>202.9</b>         |
| Softwood removals     | 7189                   |                        | 8052                   |                 |                      |
| Hardwood removal      | 577                    |                        | 659                    |                 |                      |
| <b>Woodfuel</b>       | <b>229</b>             |                        | <b>259</b>             | <b>14.26</b>    | <b>3.7</b>           |
| Softwood woodfuel     | 98                     | 1.120                  | 110                    |                 |                      |
| Hardwood woodfuel     | 131                    | 1.143                  | 150                    |                 |                      |
| <b>Sawlogs</b>        | <b>4569</b>            |                        | <b>5121</b>            | <b>26.38</b>    | <b>135.1</b>         |
| Softwood sawlogs      | 4390                   | 1.120                  | 4916                   |                 |                      |
| Hardwood sawlogs      | 179                    | 1.143                  | 205                    |                 |                      |
| <b>All others</b>     | <b>2968</b>            |                        | <b>3330</b>            | <b>19.23</b>    | <b>64.0</b>          |
| All others softwood   | 2702                   | 1.120                  | 3026                   |                 |                      |
| All others hardwood   | 266                    | 1.143                  | 304                    |                 |                      |

Sources: Unit values from Forestry Commission sales (averages over 5 financial years) divided by 0.9 to convert standing to felled overbark unit values.

### Estimation for 2005

|                       | Ave<br>2003-2007<br>ub | Overbark/<br>underbark | Ave<br>2003-2007<br>ob | Unit value<br>£ | Total<br>value<br>£m |
|-----------------------|------------------------|------------------------|------------------------|-----------------|----------------------|
| <b>Total removals</b> | <b>8474</b>            |                        | <b>9501</b>            |                 | <b>206.7</b>         |
| Softwood removals     | 8028                   |                        | 8992                   |                 |                      |
| Hardwood removal      | 446                    |                        | 509                    |                 |                      |
| <b>Woodfuel</b>       | <b>310</b>             |                        | <b>352</b>             | <b>14.26</b>    | <b>5.0</b>           |
| Softwood woodfuel     | 118                    | 1.120                  | 132                    |                 |                      |
| Hardwood woodfuel     | 193                    | 1.143                  | 220                    |                 |                      |
| <b>Sawlogs</b>        | <b>5219</b>            |                        | <b>5818</b>            | <b>25.14</b>    | <b>146.2</b>         |
| Softwood sawlogs      | 5117                   | 1.120                  | 5731                   |                 |                      |
| Hardwood sawlogs      | 76                     | 1.143                  | 87                     |                 |                      |
| <b>All others</b>     | <b>2945</b>            |                        | <b>3331</b>            | <b>16.65</b>    | <b>55.5</b>          |
| All others softwood   | 2794                   | 1.120                  | 3129                   |                 |                      |
| All others hardwood   | 177                    | 1.143                  | 202                    |                 |                      |

Source: Unit values from Forestry Commission sales (averages over 5 financial years) divided by 0.9 to convert standing to felled overbark unit values.

Note – all estimations are copied from a spreadsheet using unrounded data.

### 11.3.2 Reclassification into FRA 2010 categories

No reclassification undertaken.

### 11.4 Data for Table T11

| FRA 2010 Category                                 | Industrial roundwood removals |         |         | Woodfuel removals |       |       |
|---|-------------------------------|---------|---------|-------------------|-------|-------|
|   | 1990                          | 2000    | 2005    | 1990              | 2000  | 2005  |
| Total volume (1000 m <sup>3</sup> o.b.)           | 6,901                         | 8,452   | 9,149   | 256               | 259   | 352   |
| ... of which from forest                          | 6,901                         | 8,452   | 9,149   | 256               | 259   | 352   |
| Unit value (local currency / m <sup>3</sup> o.b.) | 25.37                         | 23.56   | 22.05   | 11.50             | 14.26 | 14.26 |
| Total value (1000 local currency)                 | 175,085                       | 199,159 | 201,715 | 2,900             | 3,700 | 5,000 |

Note: The figures for the reporting years refer to the averages of the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively.

|                        | 1990 | 2000 | 2005 |
|------------------------|------|------|------|
| Name of local currency | GBP  | GBP  | GBP  |

### 11.5 Comments to Table T11

| Variable / category                           | Comments related to data, definitions, etc.   | Comments on the reported trend |
|---|---|--------------------------------|
| Total volume of industrial roundwood removals | The removals figures reported in JQ1 are considered to give good coverage of industrial roundwood, all from forests.  |                                |
| Total volume of woodfuel removals             | The figures reported in JQ1 for woodfuel for years up to 2007 were expert estimates, primarily for forests. Some additional information was obtained for JWEE 2008, and better information is being compiled from |                                |

|             |   |  |
|-------------|---|--|
|             | new surveys in 2009. These may indicate additional volumes of woodfuel, including wood from areas outside forests, but figures are not available for use in FRA 2010. |  |
| Unit value  |   |  |
| Total value |   |  |

|  |
|--|
| <b>Other general comments to the table</b> |
|  |