

Table T1 – Extent of Forest and Other wooded land

1.1 FRA 2010 Categories and definitions

Category	Definition
Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds <i>in situ</i> . It does not include land that is predominantly under agricultural or urban land use.
Other wooded land	Land not classified as “Forest”, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds <i>in situ</i> ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Other land	All land that is not classified as “Forest” or “Other wooded land”.
Other land with tree cover (Subordinated to “Other land”)	Land classified as “Other land”, spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.

1.2 National data

1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Forestry Statistics 2008 and related databases	H	Forest	1990 to 2008	Uses GB inventory 1995-99 and other sources to extrapolate forward
TBFRA 2000	L	Other wooded land	2000	Estimate of wood pastures, unchanged from TBFRA 2000
Agricultural census	H	Other land with tree cover	various 1990 to 2007	http://statistics.defra.gov.uk/esg/ Source used for orchards

1.2.2 Classification and definitions

National class	Definition
Woodland	In NIWT, same as forest in FRA, except canopy cover threshold 20% rather than 10%, and minimum area 0.1 ha rather than 0.5 ha.
Wood pasture	A priority habitat under Biodiversity Action Plan, which has trees but usually insufficient canopy cover to be classified as woodland.
Orchard	In agricultural census, area of fruit trees; mostly apples, also pears, plums and other fruit.

1.2.3 Original data

The National Inventory of Woodland & Trees (NIWT) 1995-99 gave total GB woodland area of 2,665,000 hectares. This is not used directly.

Annual estimates for GB (and latterly for UK) are published in Forestry Statistics and Forestry Facts & Figures (FFF). Woodland area for Northern Ireland (83,000 ha for 2000), including estimates of private woodland, are published annually in the Forest Service Annual Report, and incorporated into Forestry Statistics. This gives:

- UK woodland area (2000) = 2,793,000 ha (Forestry Statistics 2004)
- UK woodland area (2005) = 2,825,000 ha (Forestry Statistics 2008)
- UK woodland area (2008) = 2,841,000 ha (Forestry Statistics 2008)

Other data used for Table T1:

- Area of orchards in UK (000 ha, from June agricultural censuses, statistical notices, on Defra website): 1990 34.5, 2000 28.0, 2005 23.3, 2007 23.0
- Area of wood pastures, 20,000 ha, used as estimate of other wooded land for TBFRA 2000; in the absence of any new information, assume that this figure can be used for all years: 1990, 2000, 2005 and 2010. No information exists for other types of other wooded land, but the areas are expected to be small.

In 2005 the Office for National Statistics (ONS) compiled a new set of standard area measurements for total land and inland water, based on Ordnance Survey mapping, intended for use in all UK statistics. These new statistics had not been communicated to FAOSTAT, but are used for this report in the expectation that FAOSTAT will be updated in 2009.

1.3 Analysis and processing of national data

1.3.1 Calibration

No calibration required. Other land calculated as the difference between total land area from ONS standard area measurements and the sum of forest plus other wooded land.

1.3.2 Estimation and forecasting

Published annual estimates of woodland area are compiled by rolling forward from the inventory base, using administrative data for state woodland, sales of state woodland and new planting. At present no adjustment is made for woodland converted to another land use, because the areas are believed to be small and there is no reliable source of data. This gave the published figure for 2000.

A similar process was used to extrapolate back to 1990, as shown below. In this calculation, it is assumed that areas of broadleaved restocking were conifers before harvesting, because harvested broadleaved volumes are relatively small, and would normally be from thinning or selective felling, rather than clear-fell followed by restocking.

Broadleaved totals for 1990 were derived by starting from the broadleaved totals for 2000, then subtracting broadleaved new planting and broadleaved restocking in the years 1990 to 2000. Conifer totals for 1990 were derived by starting from the conifer totals for 2000, then subtracting conifer new planting and adding broadleaved restocking in the years 1990-2000. Below the new estimates are shown, for comparison, the original published statistics for 1990, which had been derived by extrapolating forward from the 1980 Census. The new estimates for 1990 are much higher, particularly for broadleaves, because of the 1995-99 National Inventory's better coverage and better recognition of woodland areas.

000 hectares

	UK		England		Scotland		Wales		N Ireland	
	C	B	C	B	C	B	C	B	C	B
Area 2000	1662	1132	377	726	1050	269	168	121	67	16
NP 1990-2000	87	96	7	44	73	45	1	4	6	3
B RS 1990-2000		41		22		15		3		1
Area 1990 (calc)	1616	995	392	660	992	209	170	114	62	12
Area 1990 (old)	1576	823	386	572	956	164	173	75	61	13

C = conifers, B = broadleaves

NP = new planting (all new woodland creation), RS = restocking

The published figures for March 2005 and March 2008 were extrapolated forward in a similar way to the extrapolation for 2000. They were affected by a reclassification of Forestry Commission open land within the forest in moving to a new Geographical Information System (GIS) in 2001, when around 20,000 hectares previously included in woodland area was mapped out as open space (not counted in woodland area in the GIS). The forecast for 2010 was projected forward by two years from the area at March 2008, assuming a similar annual level of new woodland creation to 2000-2005 (around 10,000 hectares a year, representing a slight recovery from 2005-08, when the grant schemes were being changed).

1.3.3 Reclassification into FRA 2010 categories

The classification of Forestry Commission integral open space as woodland before 2001 seems to be closer to the FRA definition, so to adjust for the reclassification in 2001, 20,000 hectares have been added to the published woodland area in deriving the estimate for 2005 and forecast for 2010.

1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	2611	2793	2845	2881
Other wooded land	20	20	20	20
Other land	21619	21437	21385	21349
...of which with tree cover	35	28	23	22
Inland water bodies	167	167	167	167
Total for country	24417	24417	24417	24417

1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest	Two differences were noted between UK definition of “woodland” and FRA definition of “forest” (canopy cover threshold 20% rather than 10%, and minimum area 0.1 ha rather than 0.5 ha.) The area of woodland of 0.1-0.5 ha is about 37,000 hectares, from the survey of small woods & trees in the National Inventory of Woodland & Trees 1995-99 (NIWT). The area of woodland with 10-20% canopy cover is unknown because it is outside the scope of NIWT, but is also estimated to be less than 50,000 hectares. This means that the two differences are expected to balance out approximately, so figures for 1990 and 2000 were not adjusted.	As in FRA 2005, these forest areas for 1990 and 2000 are close to those reported in Global FRA 2000, but markedly higher than the TBFRA 2000 total of 2,469,000 hectares for 1995. This is because TBFRA used data from 1980 projected forward, but much better data subsequently became available from the 1995-99 National Inventory of Woodland and Trees, used for GB statistics published since 2000.
Other wooded land	The area of wood pastures, 20,000 ha, was used as estimate of other wooded land for TBFRA 2000. No information exists for other types of other wooded land, but the areas are expected to be small.	In the absence of any new information, assume that this figure can be used for all years: 1990, 2000, 2005 and 2010.
Other land		
Other land with tree cover	The area of (fruit) orchards in the Agricultural Census is used as an estimate of other land with tree cover. The branch responsible for these statistics was unable to confirm whether most orchards would be likely to meet the criteria for other land with tree cover, and this source does not give any breakdown by size. Any over-counting from using this source could be roughly balanced by other categories not recorded (e.g.) areas of urban trees of over 0.5 ha.	The figure for 2010 was extrapolated forward from 2007 assuming a similar small decline to 2004-2007.
Inland water bodies		

Other general comments to the table

All area data (including historic data) will be subject to revision when results from the next NIWT become available. The first output, in 2010 will be a new woodland map down to 0.5 ha, which will give new estimates of total forest area. This will be followed by other results, including new estimates of the area of other wooded land and sparse woodland, and a full range of sample-based results by 2015. All these will be too late for inclusion in FRA 2010.

Expected year for completion of ongoing/planned national forest inventory and/or RS survey / mapping

Field inventory	2015
Remote sensing survey / mapping	2010