

Land cover 2012



United Kingdom

September 2017

Photo: © Toni García, My City/EEA

United Kingdom

Land cover 2012

Overview of land cover & change 2006-2012

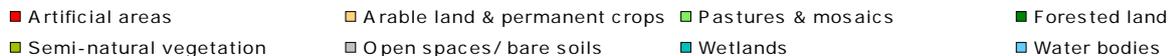
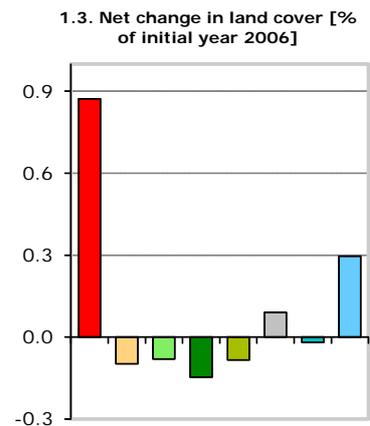
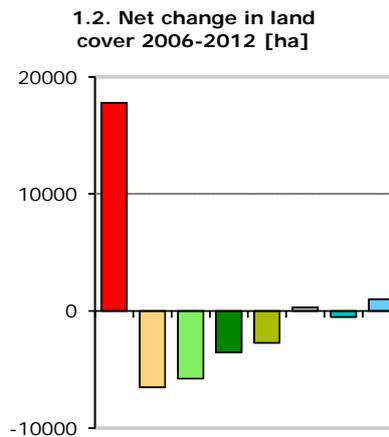
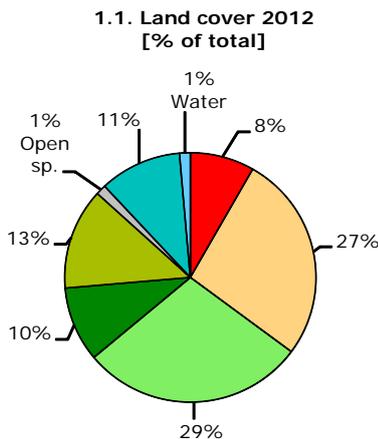
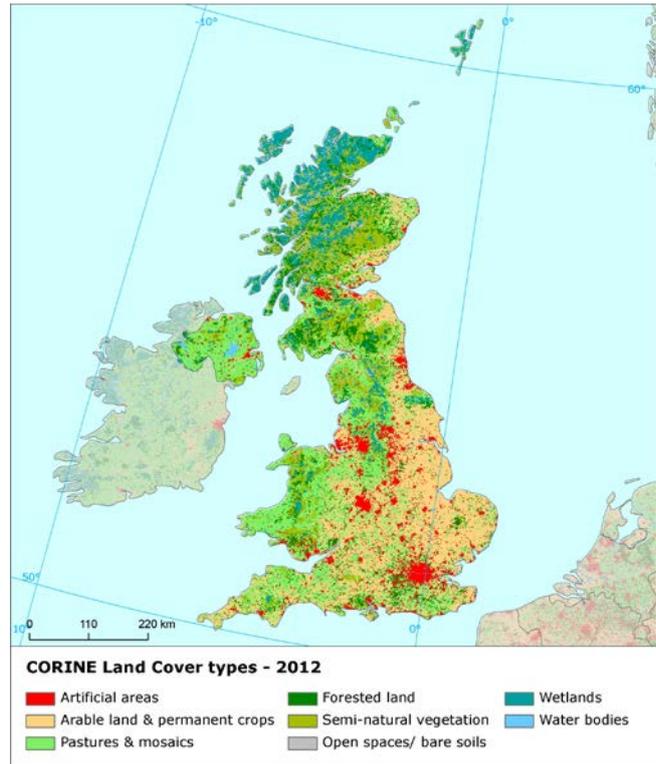
The United Kingdom shows a quite low dynamics of land cover development, with an annual land change rate of 0.14%. This pace is comparable with the previous period 2000-2006.

Forest creation and management is the most powerful driver of land cover development in the country, represented mostly by internal conversions of forested land. The only other significant driver of landscape exchange is the artificial development, with prevailing share of the sprawl of economic sites and infrastructures. With a mean annual land take rate of 0.19% (which is also comparable to the previous period), the speed of artificial sprawl in the UK is about half of the European average.

Regarding the spatial distribution, the highest density of land cover changes in general occurs in Scotland, Northern Ireland and also in Wales (due to the natural character of the local landscape, which is likely to host internal forest conversions). In contrast, artificial development is located mostly in England and also in the wider surroundings of major Scottish cities (Glasgow, Edinburgh).

Note: The results presented here are based on a change analysis of 44 land cover types mapped consistently on a 1:100.000 scale across Europe over more than decade between 2000-2006-2012 - see Corine land cover (CLC) programme for details.

Number of years between CLC2006-CLC2012 data for the United Kingdom: 6



Summary balance table 2006-2012

	Artificial areas	Arable land & permanent crops	Pastures & mosaics	Forested land	Semi-natural vegetation	Open spaces/ bare soils	Wetlands	Water bodies	TOTAL [hundreds ha]
Land cover 2006	20401	66883	71604	24188	32614	3267	26258	3426	248642
Consumption of initial LC	123.7	88.3	84.9	1750.8	45.5	9.1	10.5	1.6	2114
Formation of new LC	301.6	23.0	27.2	1715.3	18.2	12.0	5.2	11.7	2114
Net Formation of LC	177.9	-65.2	-57.7	-35.5	-27.3	2.9	-5.2	10.1	0
Net formation as % of initial year	0.9	-0.1	-0.1	-0.1	-0.1	0.1	0.0	0.3	
Total turnover of LC	425.2	111.3	112.1	3466.1	63.6	21.1	15.7	13.2	4229
Total turnover as % of initial year	2.1	0.2	0.2	14.3	0.2	0.6	0.1	0.4	1.7
Land cover 2012	20579	66817	71547	24153	32587	3270	26253	3436	248642

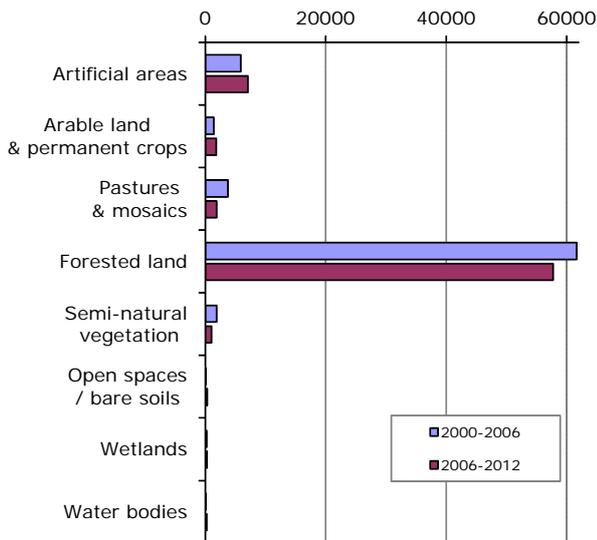
United Kingdom

Land cover trends comparison 2000-2006 vs. 2006-2012

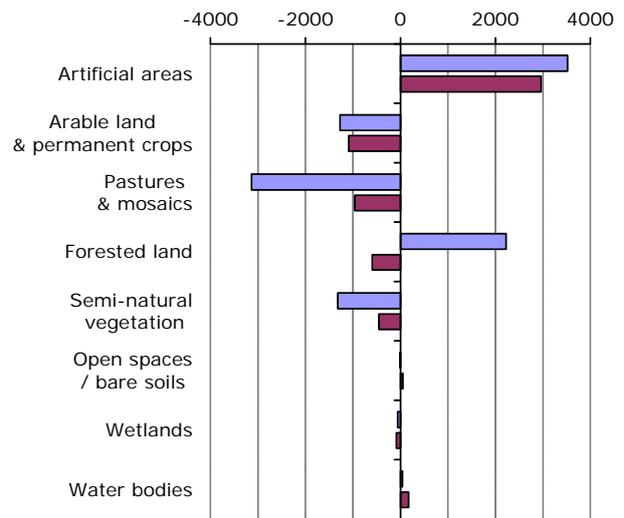
2.4. Annual land cover change
[ha/year, % of total area]



2.5. Annual turnover of LC types
[ha/year]

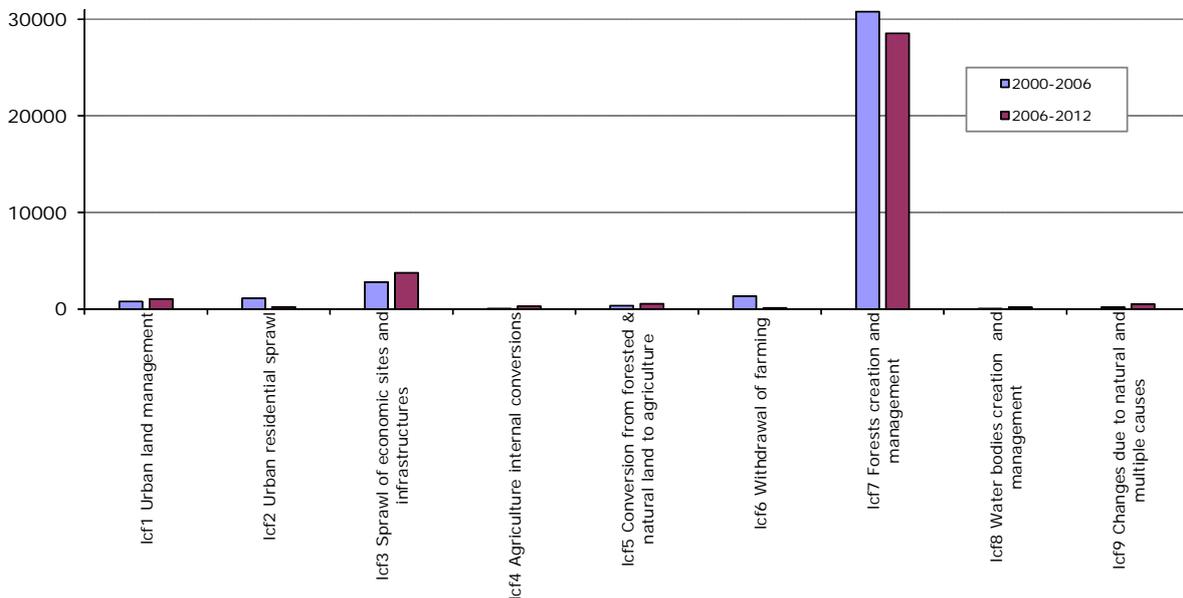


2.6. Net annual change of LC types [ha/year]

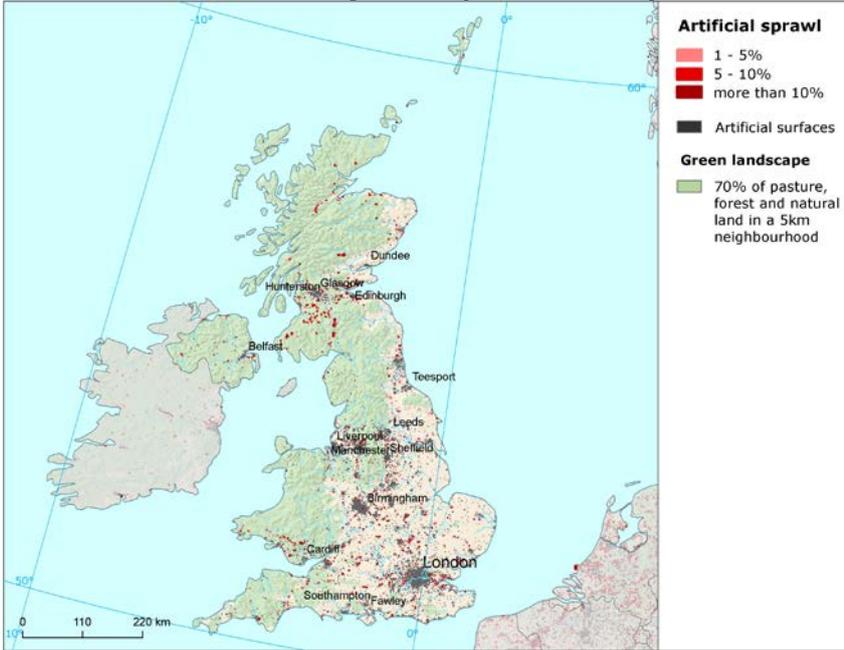


Summary trend figures		
	2000-2006	2006-2012
Annual land cover change [ha/year]	37480	35238
Annual land cover change as % of initial year	0.15%	0.14%
Land uptake by artificial development as mean annual change [ha/year]	3853	3812
Agricultural land uptake by urban and infrastructures development as mean annual change [ha/year]	3391	2431
Net uptake of forests and semi-natural land by agriculture as mean annual change [ha/year]	-1211	-109
Net conversion from pasture to arable land and permanent crops as mean annual change [ha/year]	4	192
Forest & other woodland net formation as mean annual change [ha/year]	2227	-592
Dry semi-natural land cover net formation as mean annual change [ha/year]	-1323	-406
Wetlands & water bodies net formation as mean annual change [ha/year]	-11	82

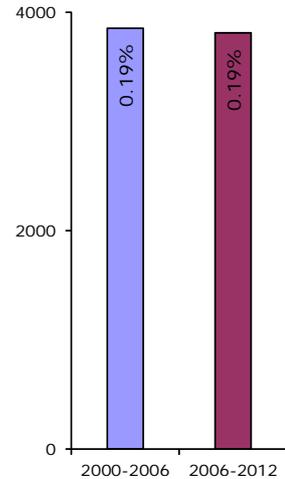
2.7. Intensity of main change drivers (LC FLOWS) [ha/year]



Artificial surfaces sprawl (2006-2012)



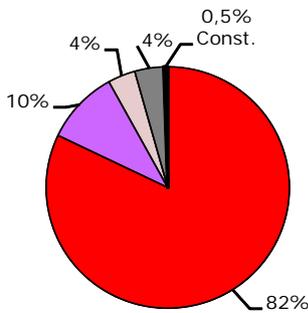
3.8. Artificial land take [ha/year, % of initial year]



Increase of economic, decline of residential sprawl

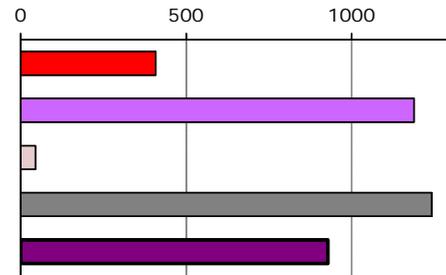
In the long term, the artificial development is the second most significant driver of land cover change in the UK. The intensity of this phenomenon remains stable, compared with the previous period. The sprawl is driven mostly by increased extension of mines, quarries and waste sites, of industrial/commercial units and also construction. On the other hand, the residential sprawl lost about half of its intensity, compared to the period 2000-2006. There occurs significant amount (and increase) of recycling of developed urban land, represented by conversion of construction sites into urban fabric and commercial/industrial units. This also indicates that (especially the residential) sprawl got into decline in the current period. Geographically, there is a dense concentration of the sprawl in central Scotland and it is also uniformly distributed all over England. This pattern is similar to the previous period. It should be mentioned, that there is not much sprawl around the capital city of London in both periods, but it seems to be more frequent in the 2006-2012 than during the previous period.

3.9. Artificial surfaces 2012 [% of total area]

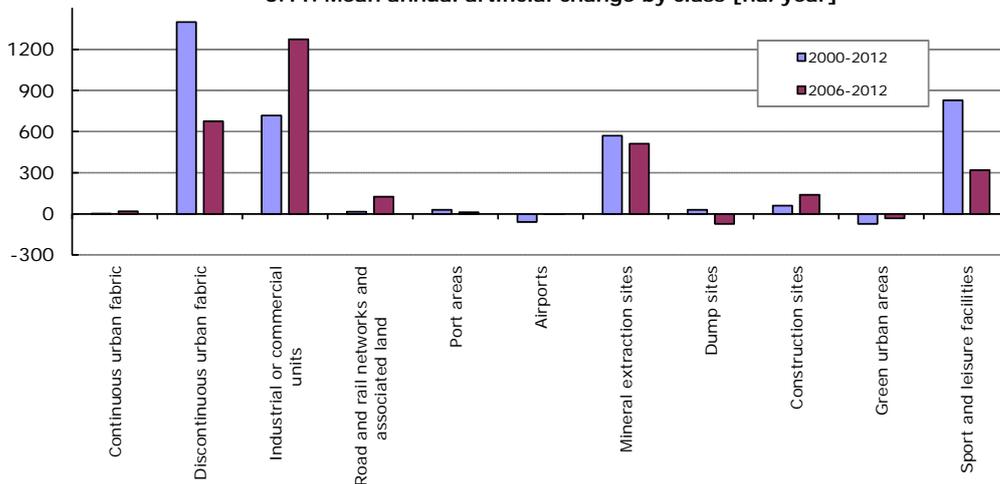


3.10. Artificial land take 2006-2012 [ha/year]

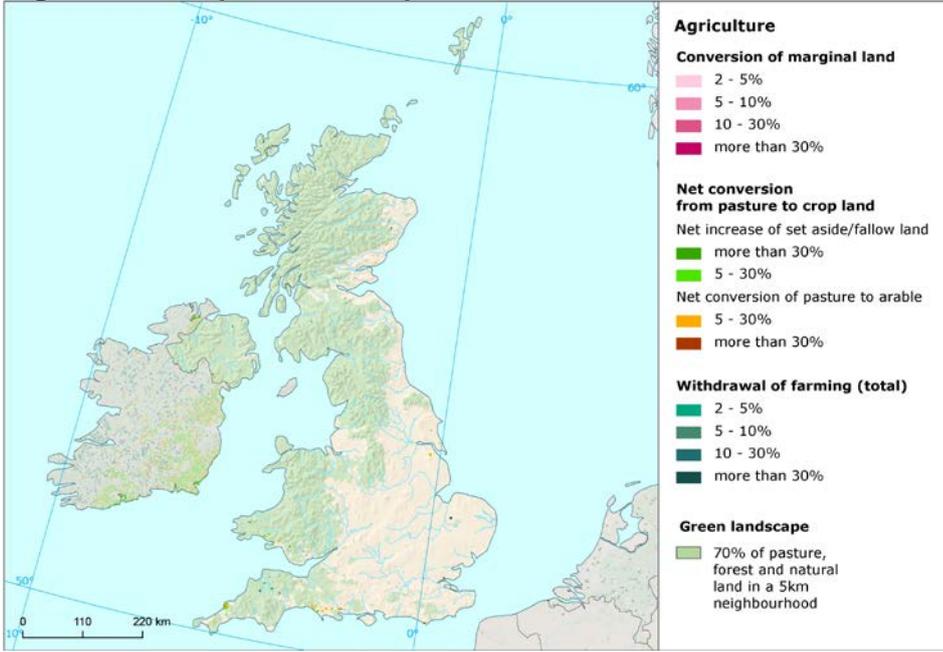
- Housing, services, recreation
- Industrial, commercial units
- Transport networks, infrastructures
- Mines, quarries, waste dumpsites
- Construction



3.11. Mean annual artificial change by class [ha/year]



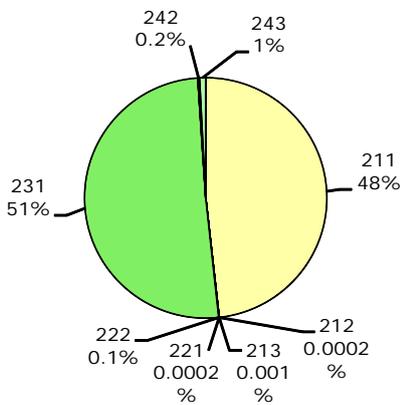
Agriculture (2006-2012)



Despite increase of internal conversions, agricultural development still low

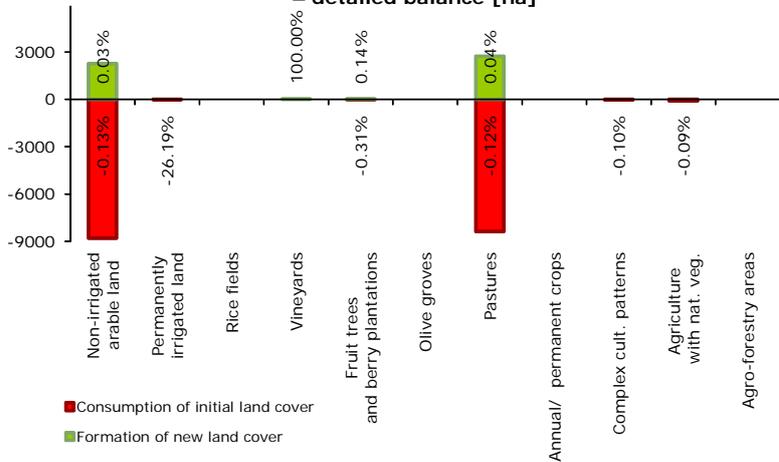
Although the agricultural land covers more than one half of the total country area, the agricultural development in the United Kingdom is not very intensive. External conversions are represented by agricultural land take by artificial sprawl (mostly extension of mineral extraction sites and construction) and also by the opposite conversion from developed areas, mainly mineral extraction sites, to agriculture. The internal agricultural development has very low intensity, with predominant intensive conversion from pasture to arable land. Despite still being low, the intensity of this flow significantly increased, compared to the previous period. The same is valid also for the opposite conversion from arable land to pasture.

4.12. Agricultural areas 2012 [% of total area]

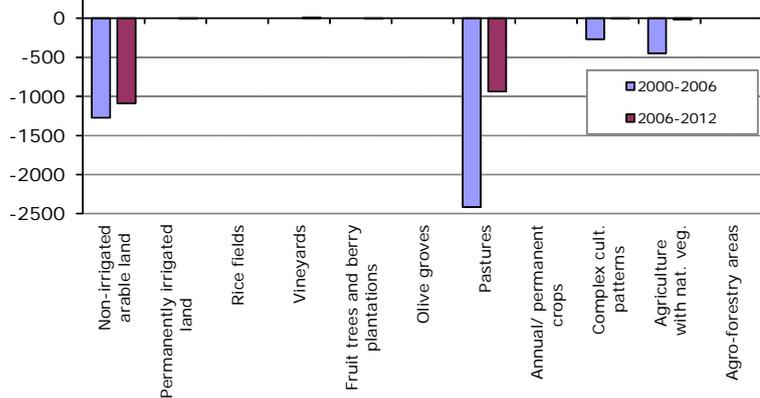


- 211 Non-irrigated arable land
- 212 Permanently irrigated land
- 213 Rice fields
- 221 Vineyards
- 222 Fruit trees and berry plantations
- 223 Olive groves
- 231 Pastures
- 241 Annual crops associated with permanent crops
- 242 Complex cultivation patterns
- 243 Agriculture land with significant areas of natural vegetation
- 244 Agro-forestry areas

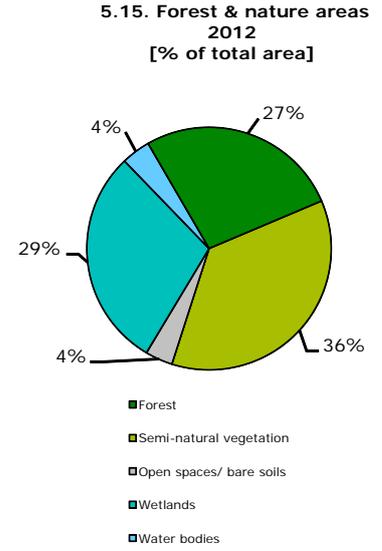
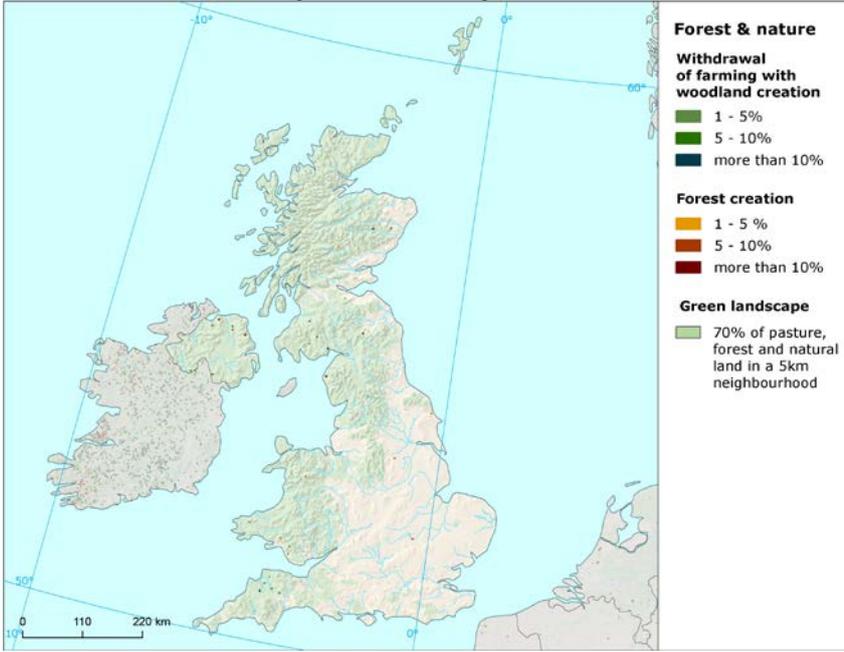
4.13. Development of agricultural areas 2006-2012 - detailed balance [ha]



4.14. Mean annual agricultural change by class [ha/year]



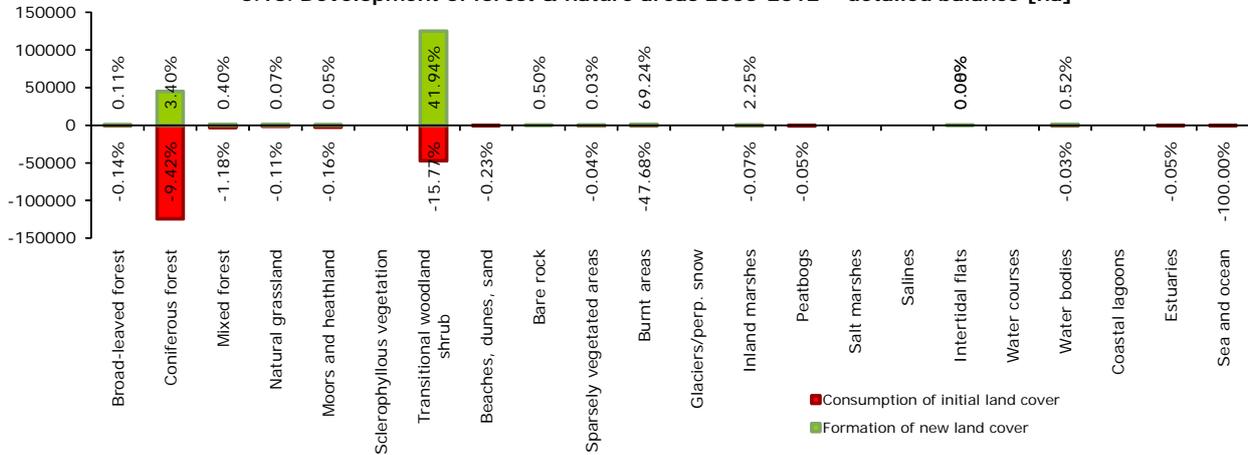
Forest & nature (2006-2012)



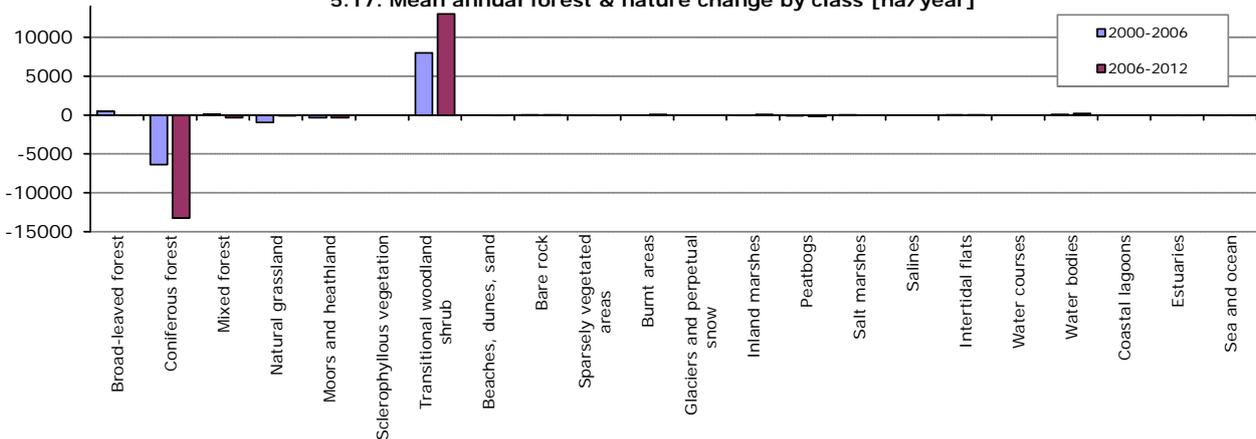
Intensive internal exchange of forested land

Forest creation and management is by far the most intensive flow in the United Kingdom landscape in both periods 2000-2006 and 2006-2012. It is represented almost exclusively by internal conversions of forested land, with prevailing share of recent felling and conversion. These changes are distributed mostly over the highland regions - in Scotland, Northern Ireland and Wales. Beside these internal changes, natural land is consumed by artificial sprawl, especially of economic sites and infrastructures. There also occurs various types of other internal land cover flows in the natural landscape, represented by semi-natural creation, rotation, forest and shrub fires or water bodies' creation.

5.16. Development of forest & nature areas 2006-2012 – detailed balance [ha]



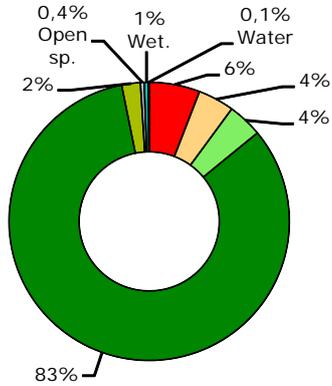
5.17. Mean annual forest & nature change by class [ha/year]



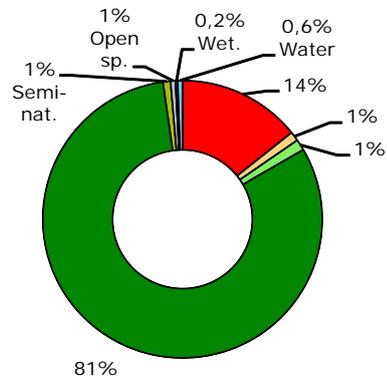
Annex: Land cover flows and trends

Land cover flows 2006-2012

6.18. Consumption of land cover 2006-2012 [% of total change area]

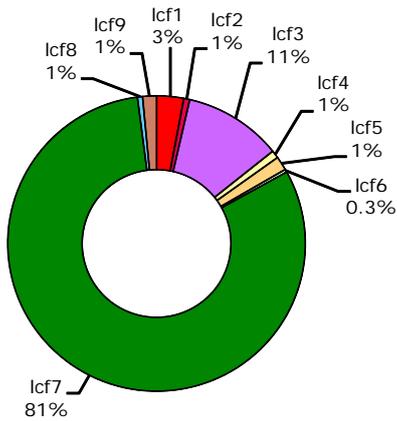


6.19. Formation of land cover 2006-2012 [% of total change area]



- Artificial areas
- Arable land & permanent crops
- Pastures & mosaics
- Forested land
- Semi-natural vegetation
- Open spaces/ bare soils
- Wetlands
- Water bodies

6.20. Drivers of change (LC FLOWS) 2006-2012 [% of total change area]

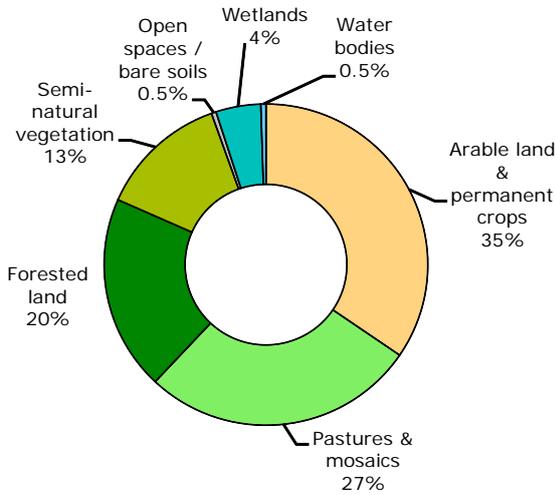


- lcf1 Urban land management
- lcf2 Urban residential sprawl
- lcf3 Sprawl of economic sites and infrastructures
- lcf4 Agriculture internal conversions
- lcf5 Conversion from forested & natural land to agriculture
- lcf6 Withdrawal of farming
- lcf7 Forests creation and management
- lcf8 Water bodies creation and management
- lcf9 Changes due to natural and multiple causes

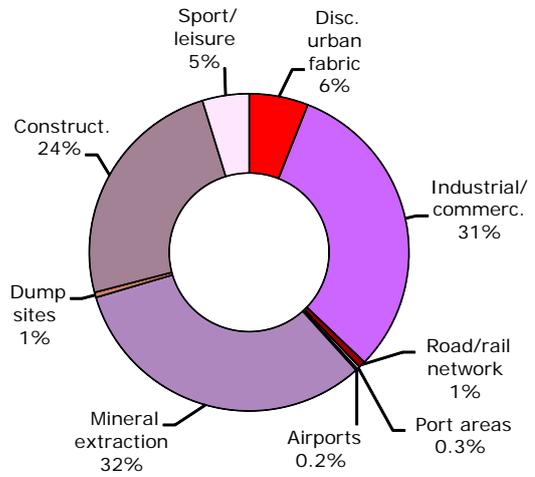
United Kingdom

Artificial areas

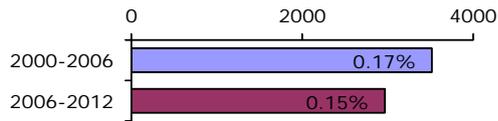
7.21. Consumption by artificial land take 2006-2012 [% of total]



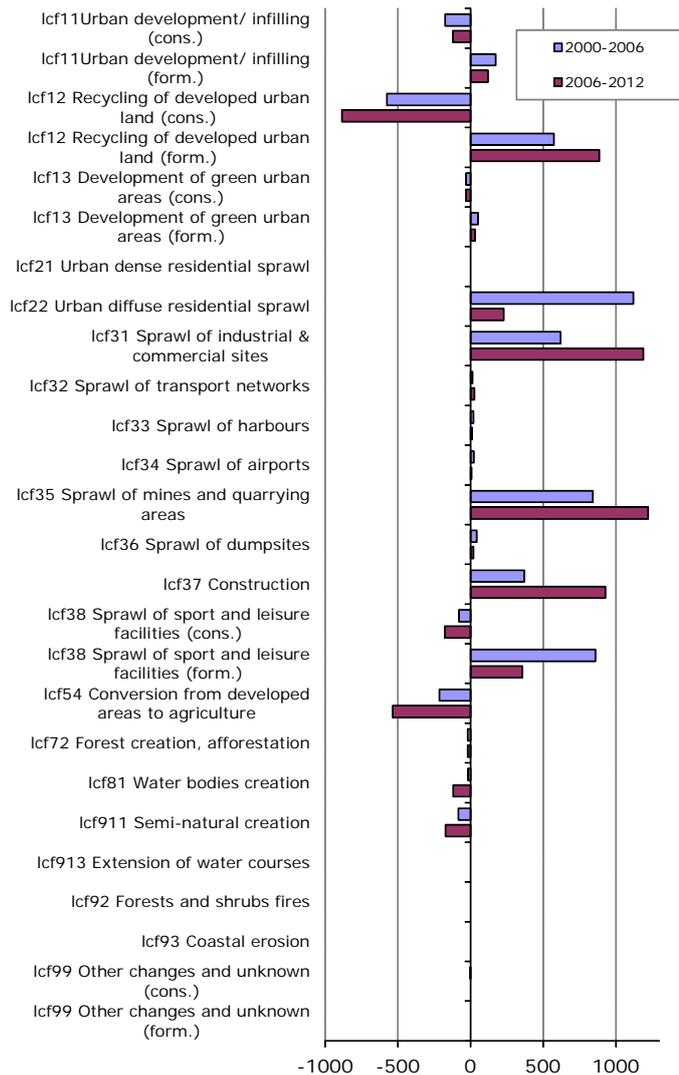
7.22. Formation by artificial land take 2006-2012 [% of total]



7.23. Net formation of artificial area [ha/year, % of initial year]



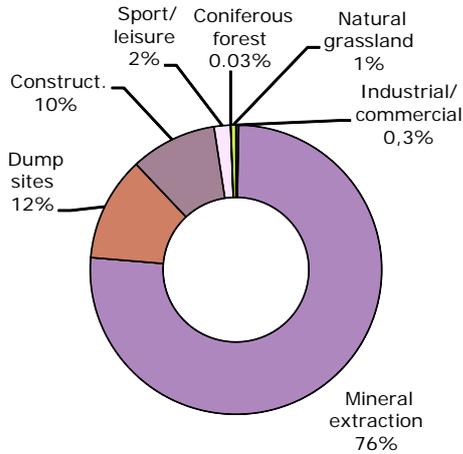
7.24. Artificial development by change drivers (LC FLOWS) [ha/year]



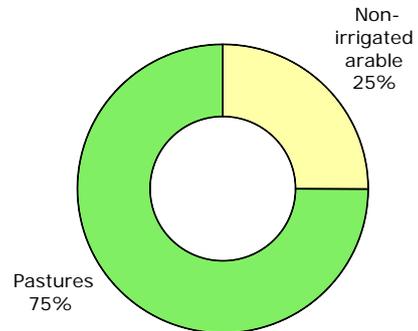
United Kingdom

Agriculture

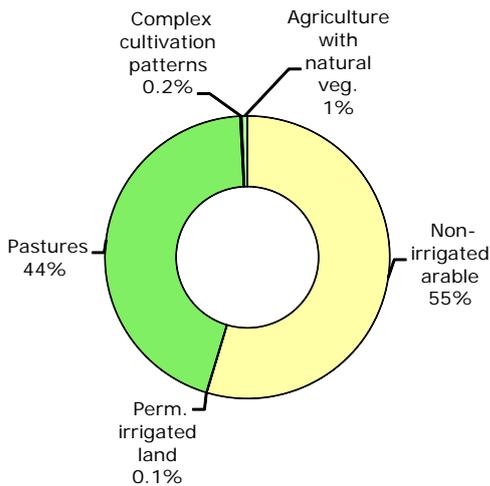
8.25. LC consumed by agriculture 2006-2012 [% of total]



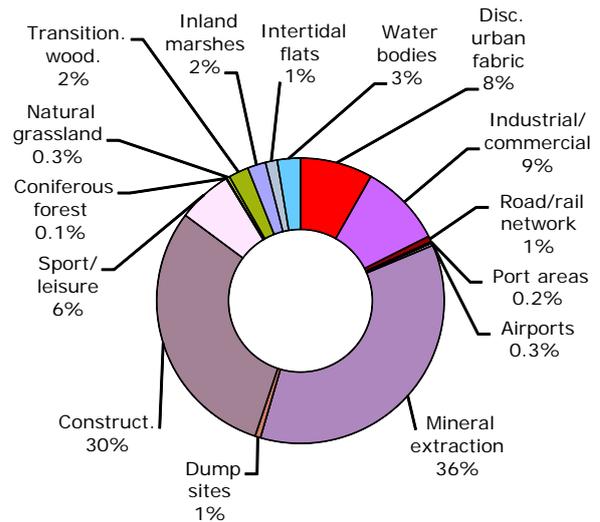
8.26. Formation of agricultural land from non-agriculture 2006-2012 [% of total]



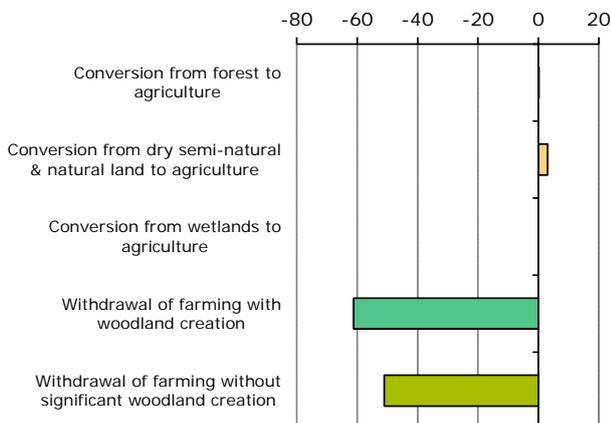
8.27. Consumption of agricultural land by non-agriculture 2006-2012 [% of total]



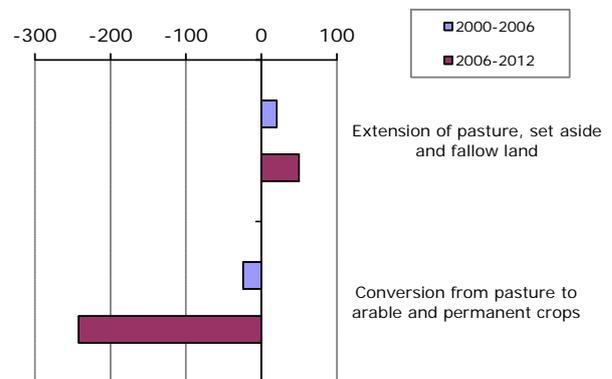
8.28. Formation of non-agricultural land from agriculture 2006-2012 [% of total]



8.29. Main annual conversions between agriculture and forests & semi-natural land 2006-2012 [ha/year]

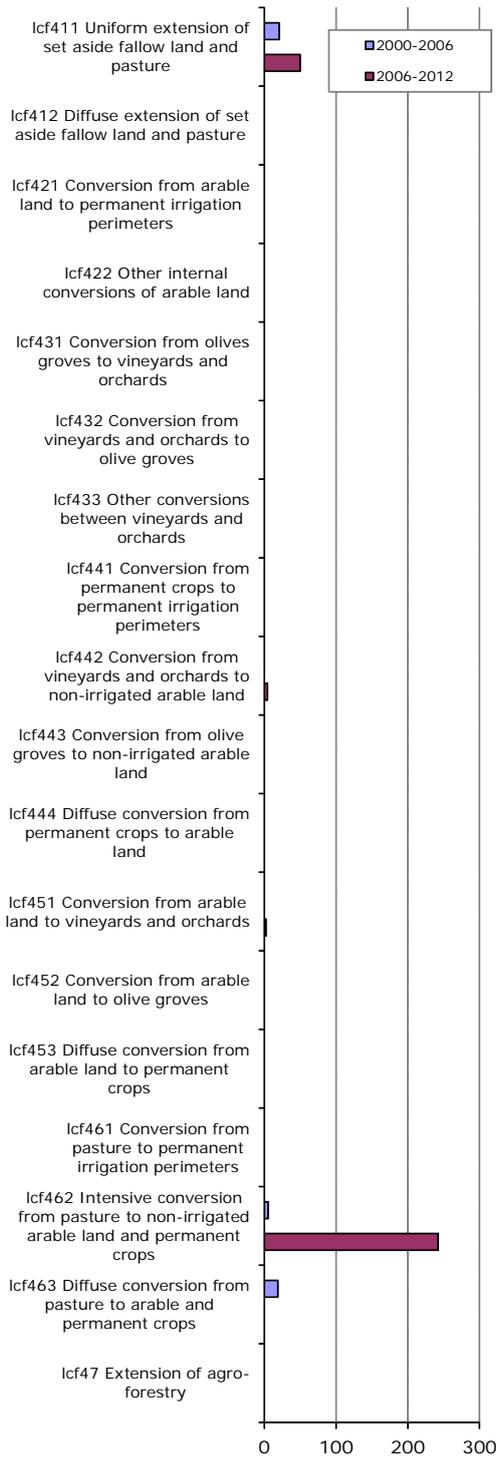


8.30. Mean annual conversion between arable land and pasture [ha/year]

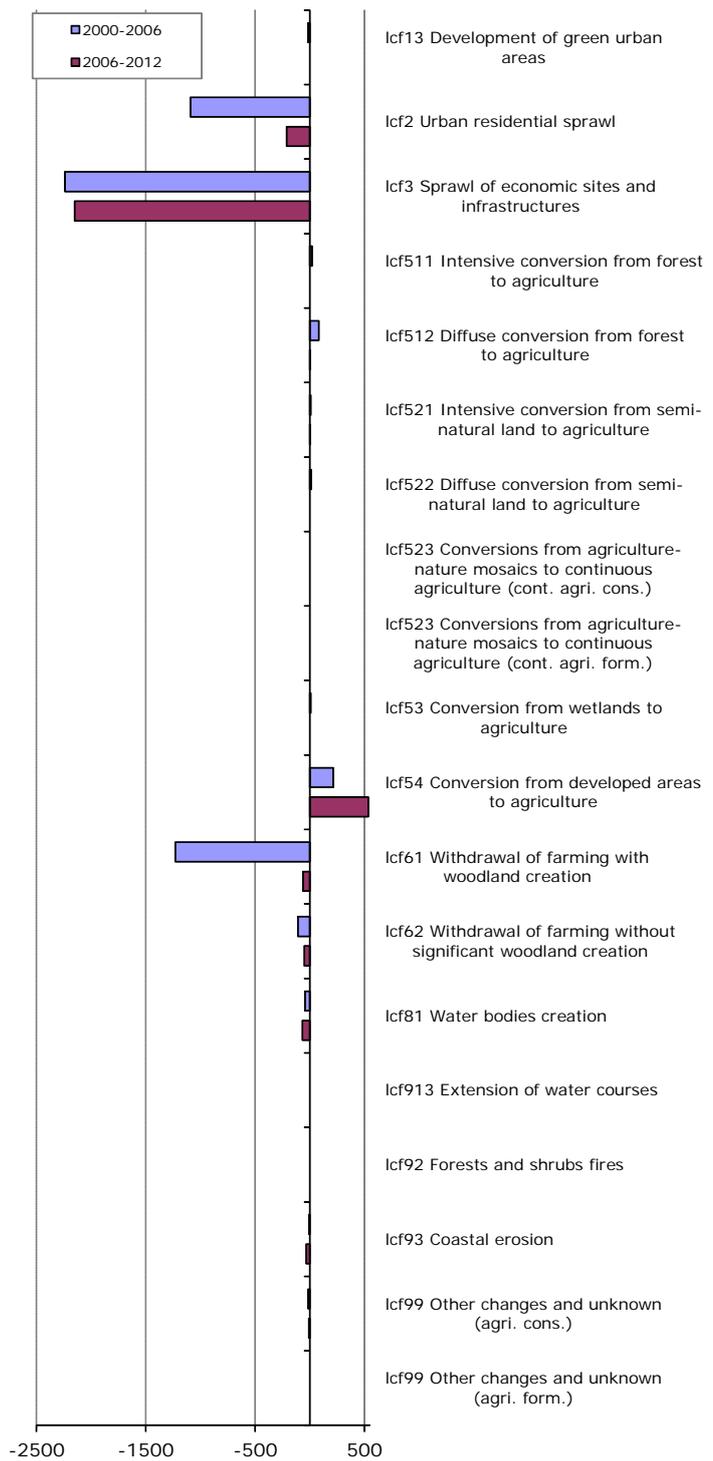


United Kingdom

9.31. Mean annual agriculture internal conversions [ha/year]

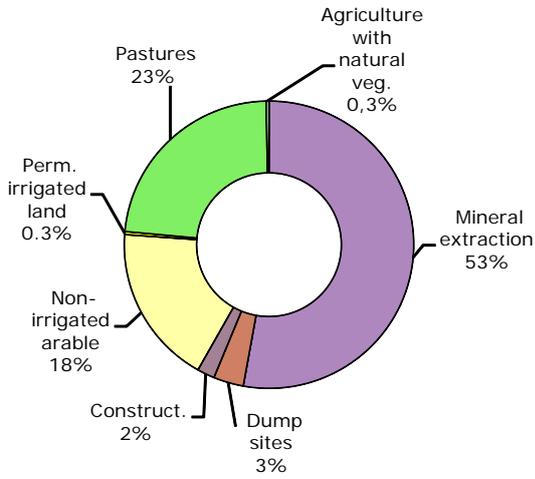


9.32. Mean annual conversions between agriculture and other LC types [ha/year]

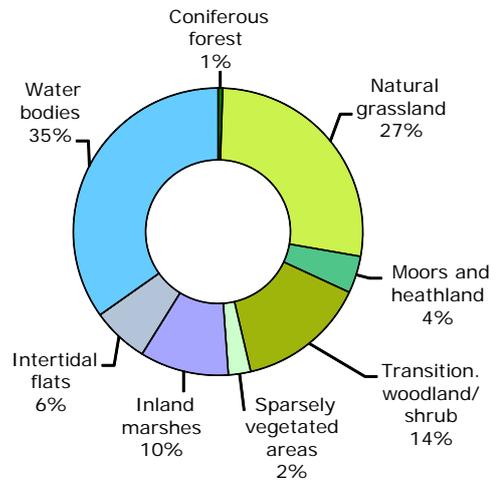


Forest & nature

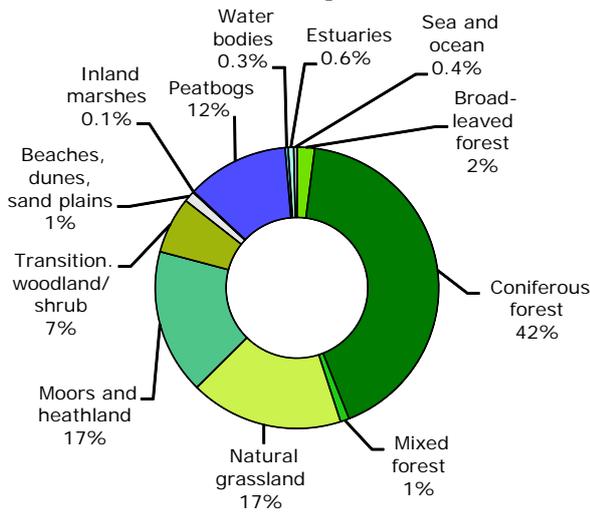
10.33. LC consumed by forest & nature 2006-2012 [% of total]



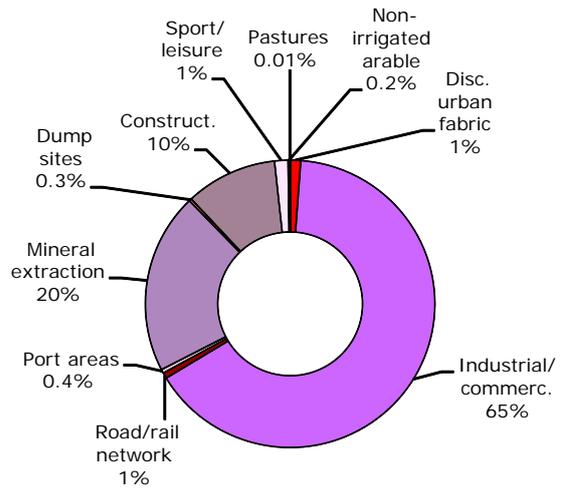
10.34. Formation of forest & nature land from non-forest /nature 2006-2012 [% of total]



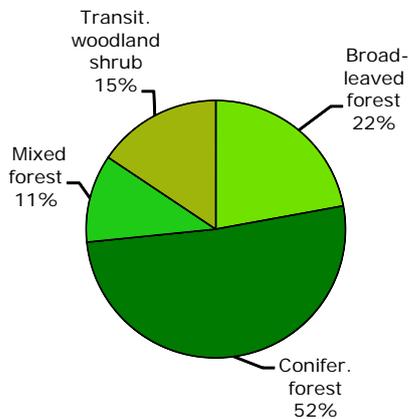
10.35. Consumption of forest & nature land by non-forest/nature 2006-2012 [% of total]



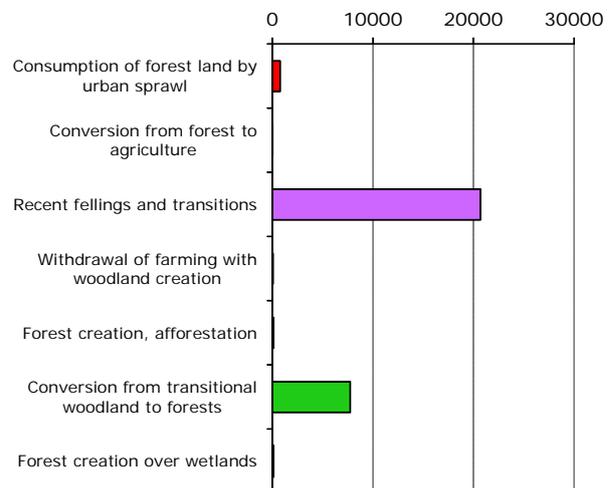
10.36. Formation of non-forest/nature land from forest & nature 2006-2012 [% of total]



10.37. Forested land 2012 [% of total area]

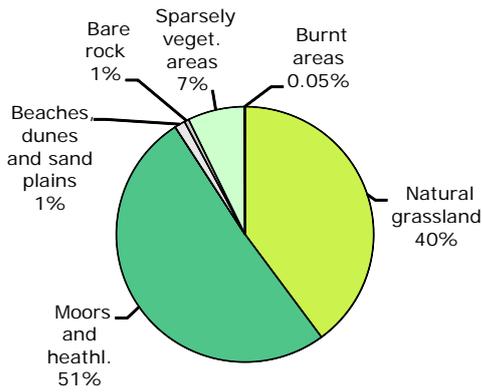


10.38. Main trends in woodland & forests consumption/formation 2006-2012 [ha/year]

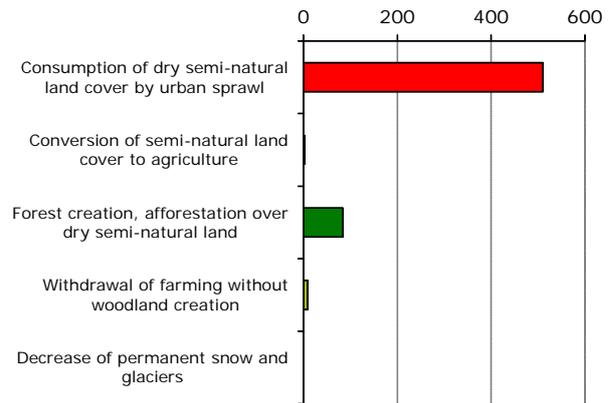


United Kingdom

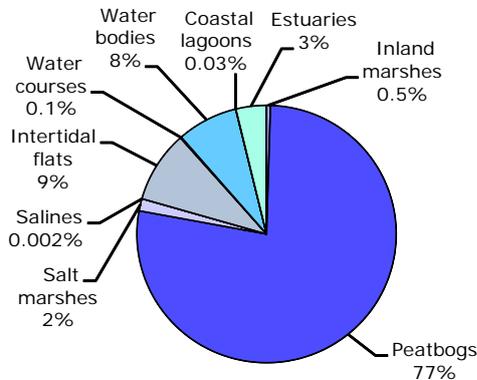
11.39. Dry semi-natural areas 2012
[% of total area]



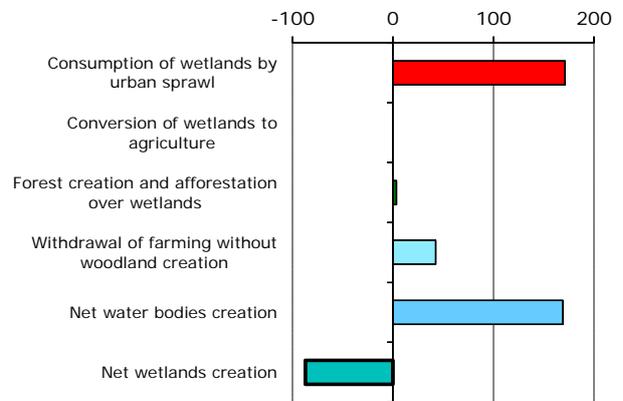
11.40. Main trends in dry semi-natural land consumption/formation 2006-2012
[ha/year]



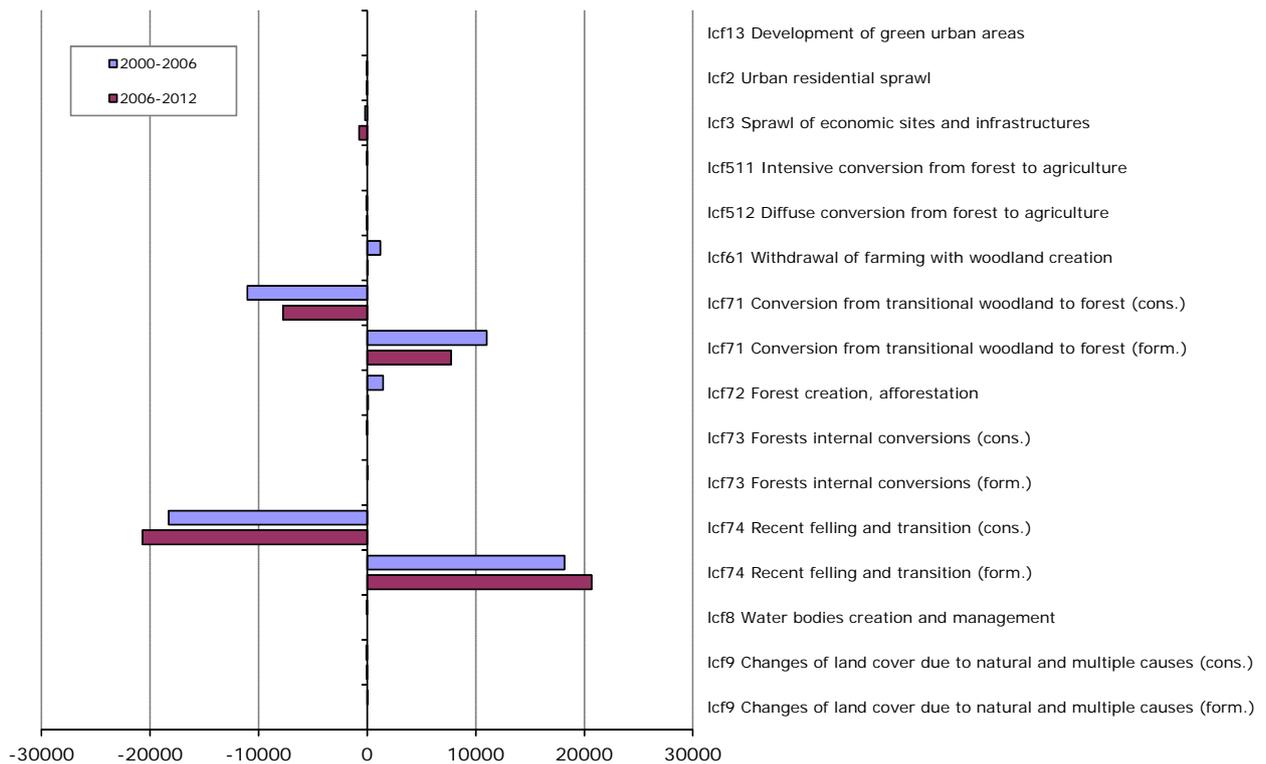
11.41. Wetlands & water 2012
[% of total area]



11.42. Main trends in wetlands & water consumption/formation 2006-2012
[ha/year]

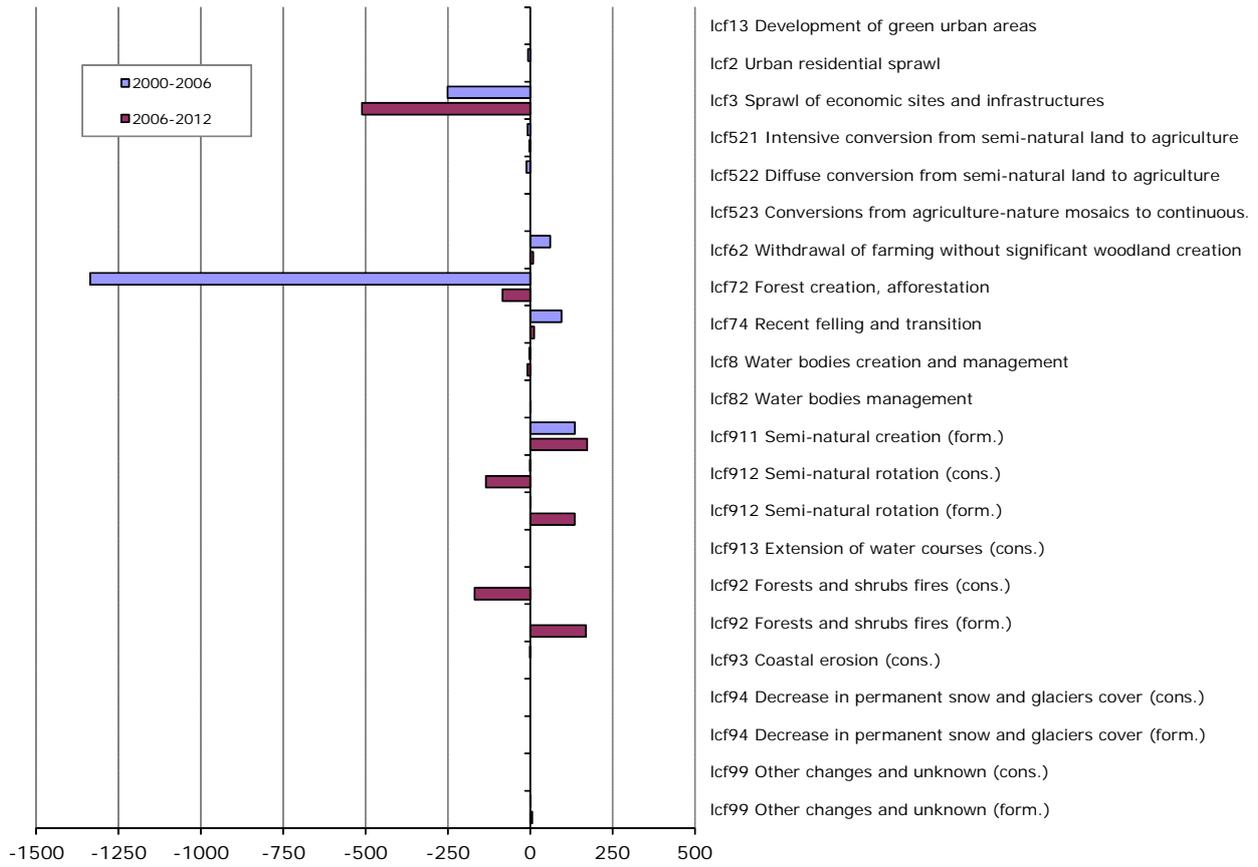


11.43. Mean annual conversions of forest & other woodland
[ha/year]

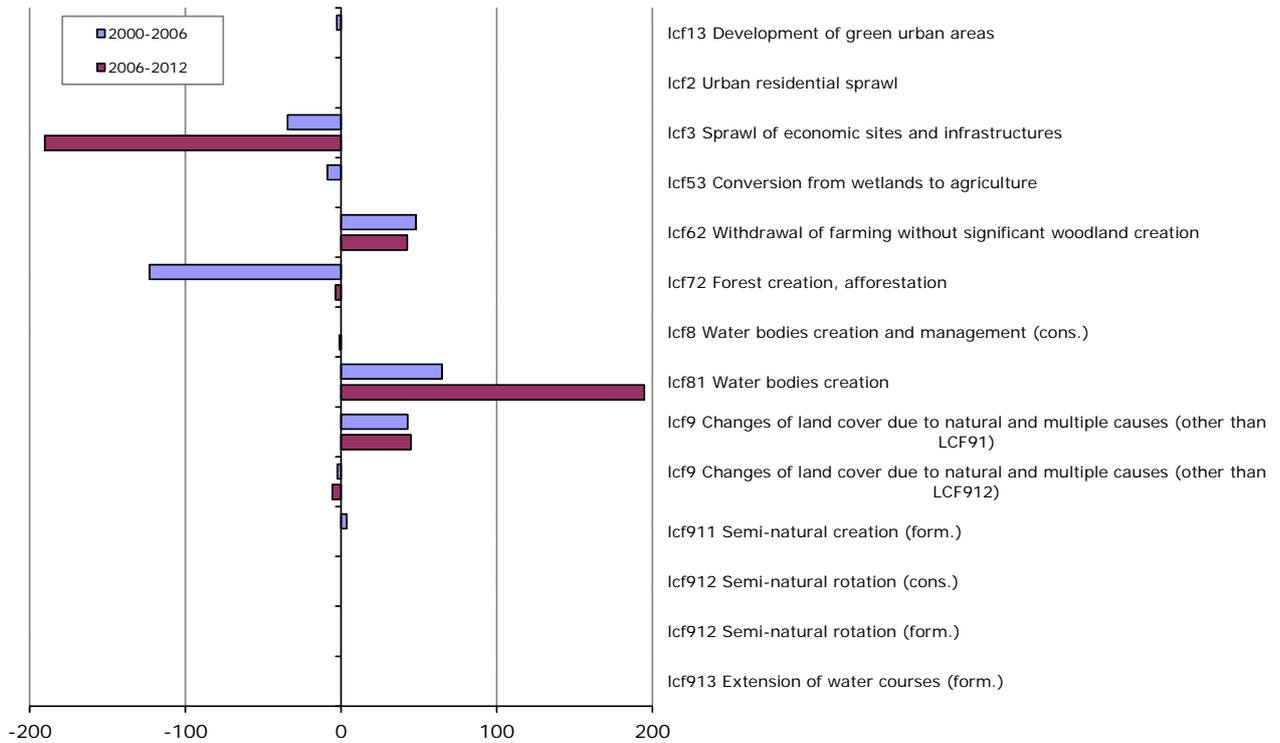


United Kingdom

12.44. Mean annual conversions of dry semi-natural LC [ha/year]

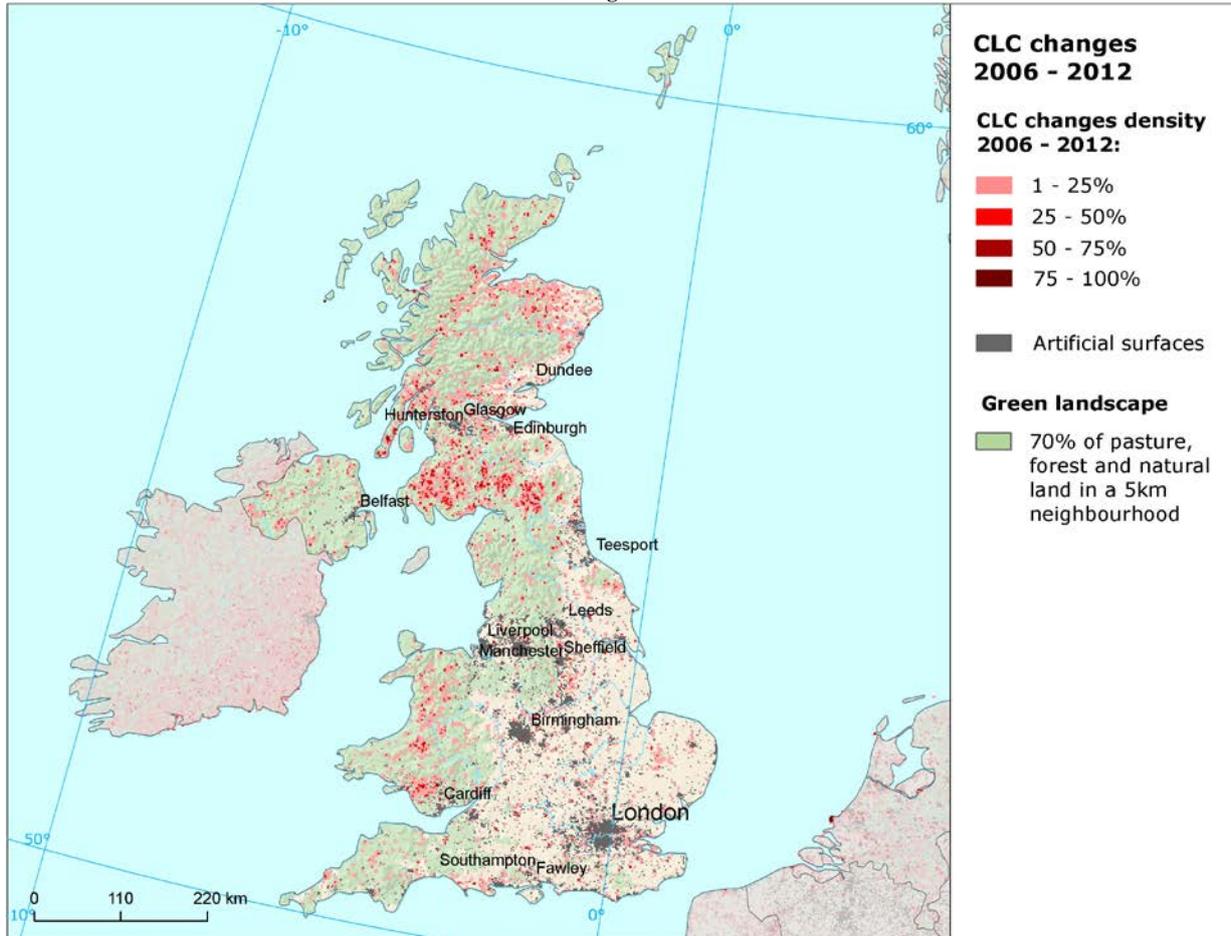


12.45. Mean annual conversions of wetlands and water LC [ha/year]

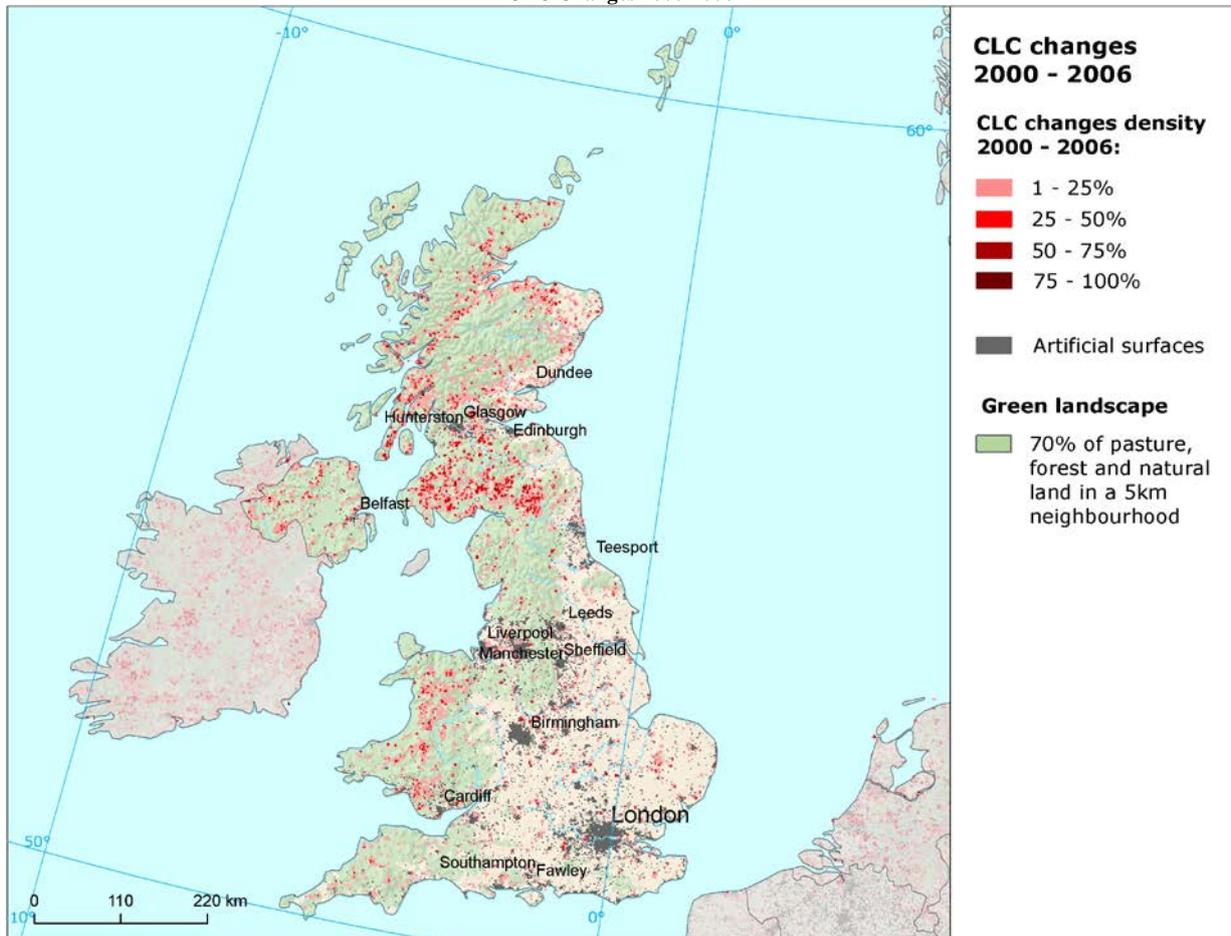


United Kingdom

CLC Changes 2006-2012

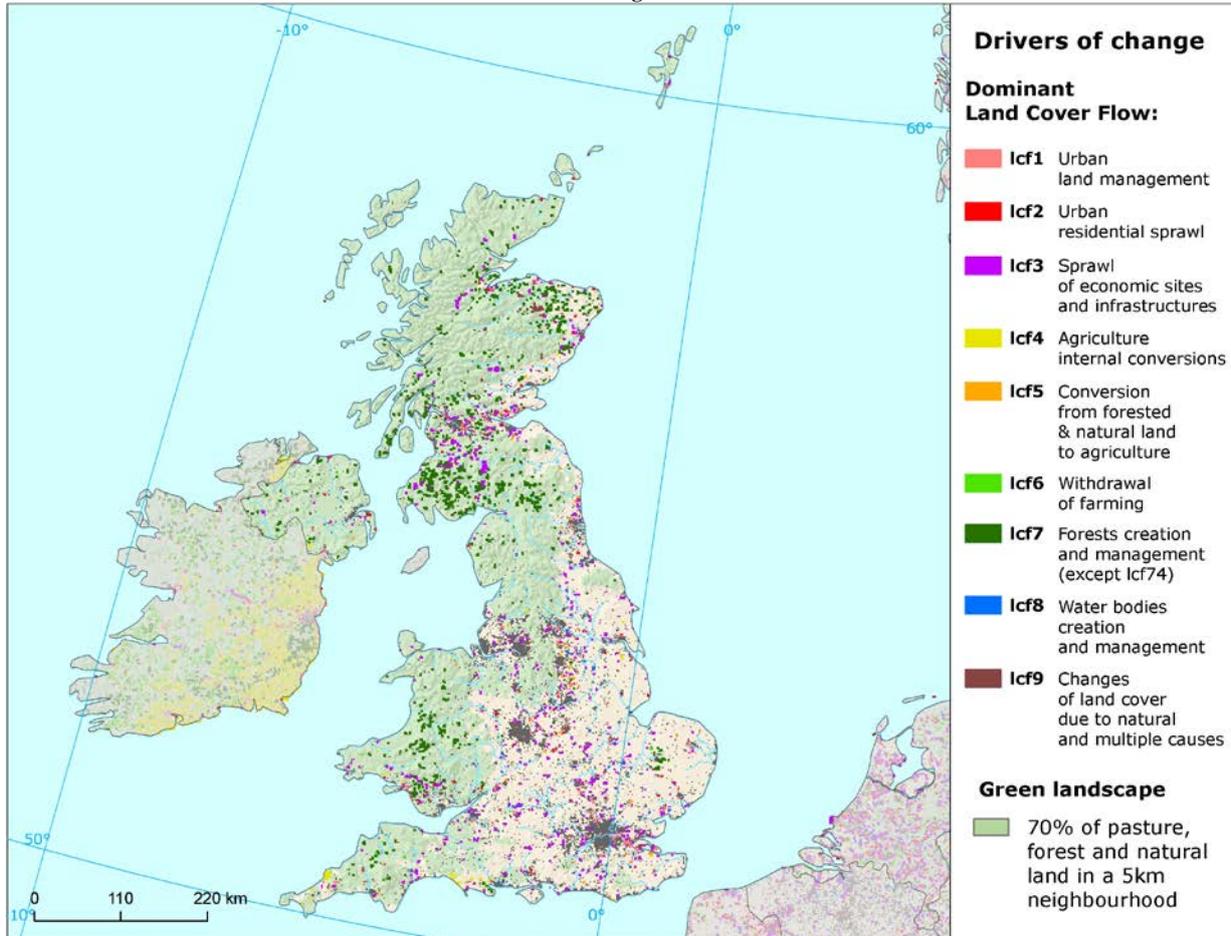


CLC Changes 2000-2006

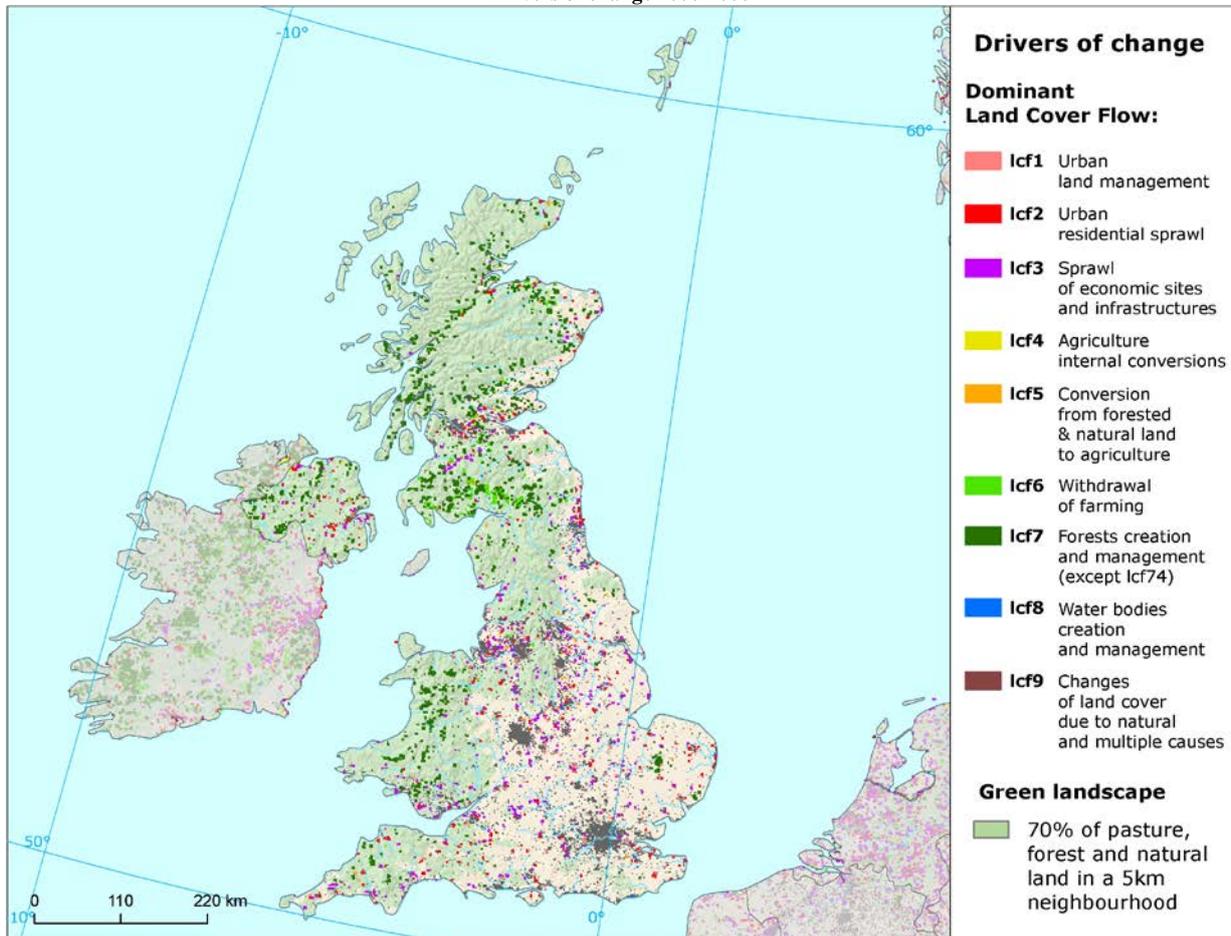


United Kingdom

Drivers of change 2006-2012

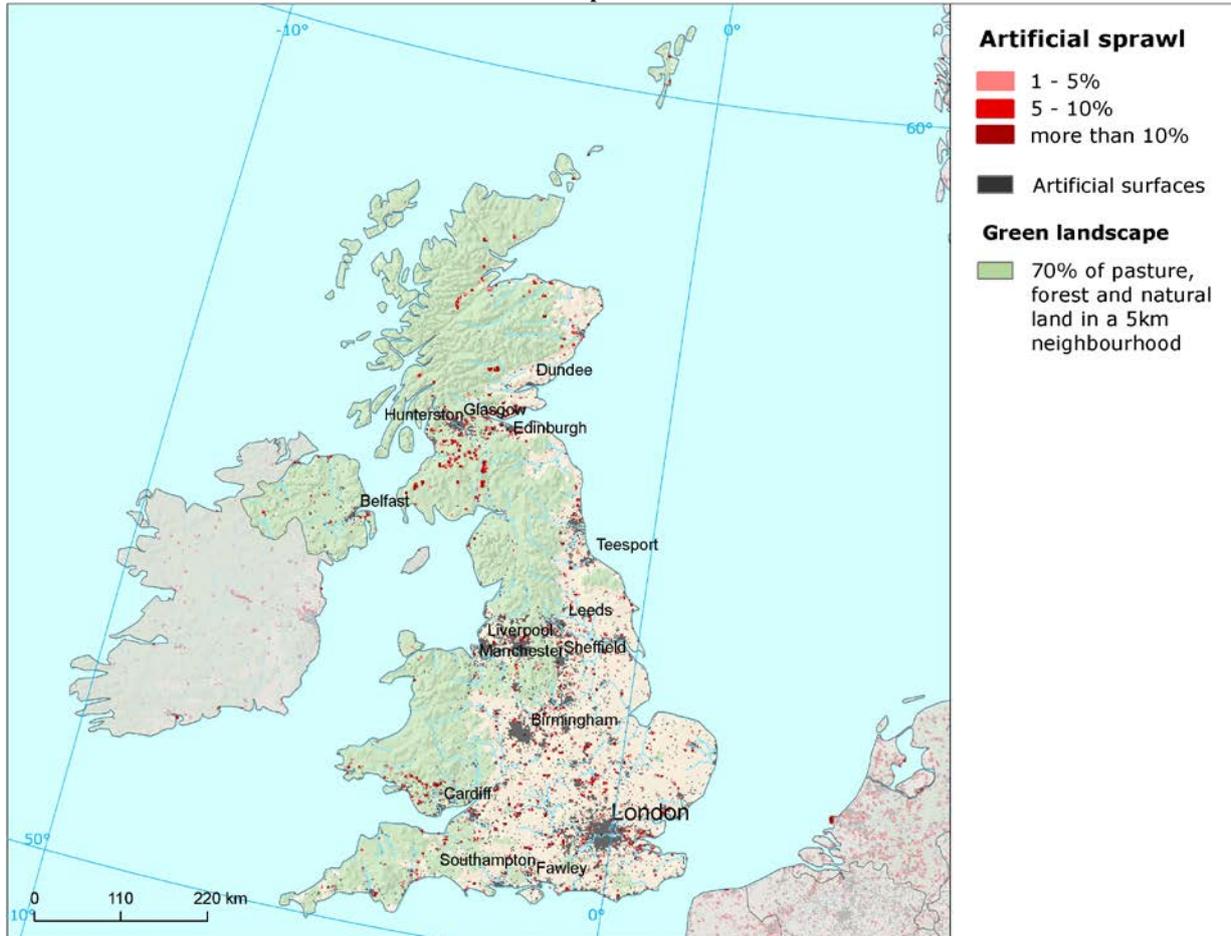


Drivers of change 2000-2006

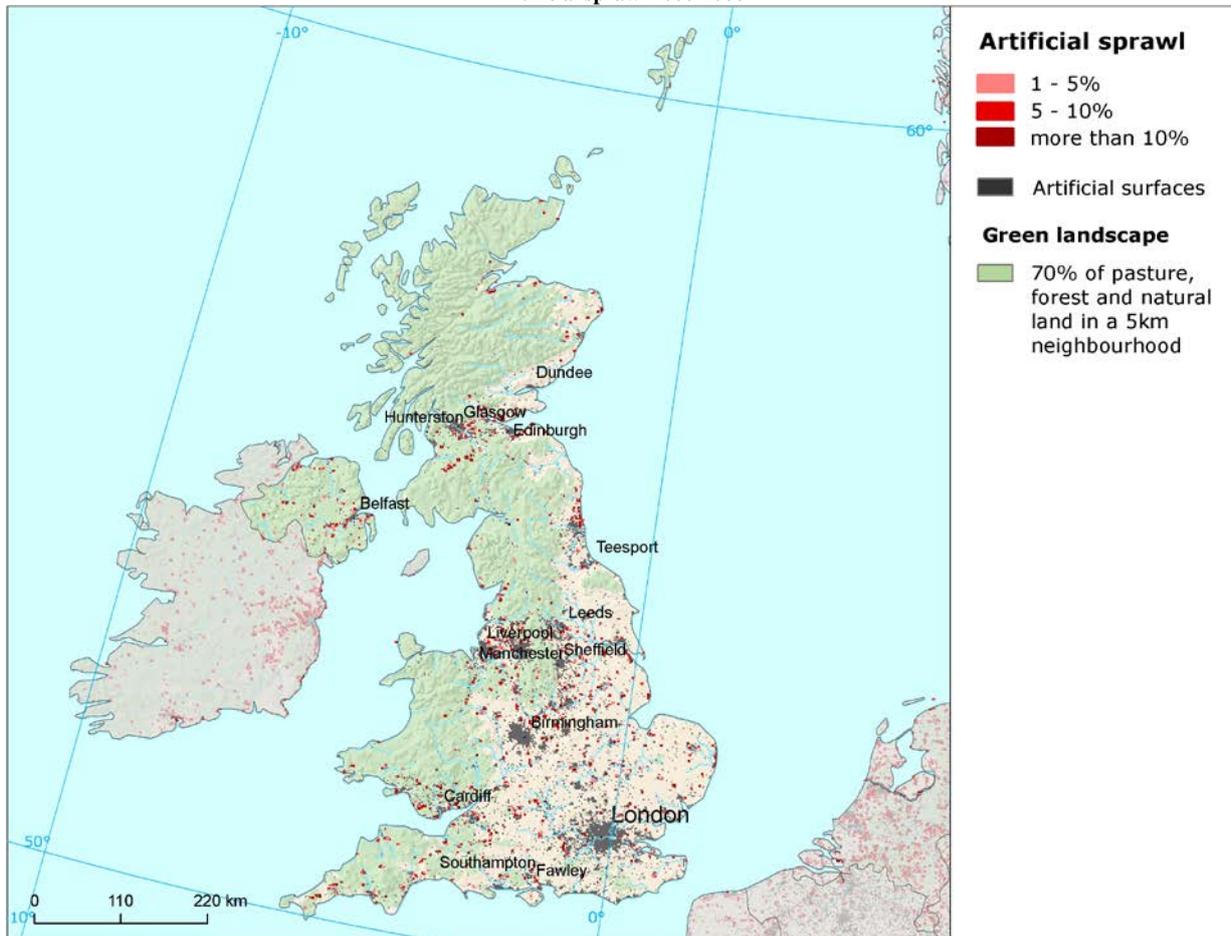


United Kingdom

Artificial sprawl 2006-2012

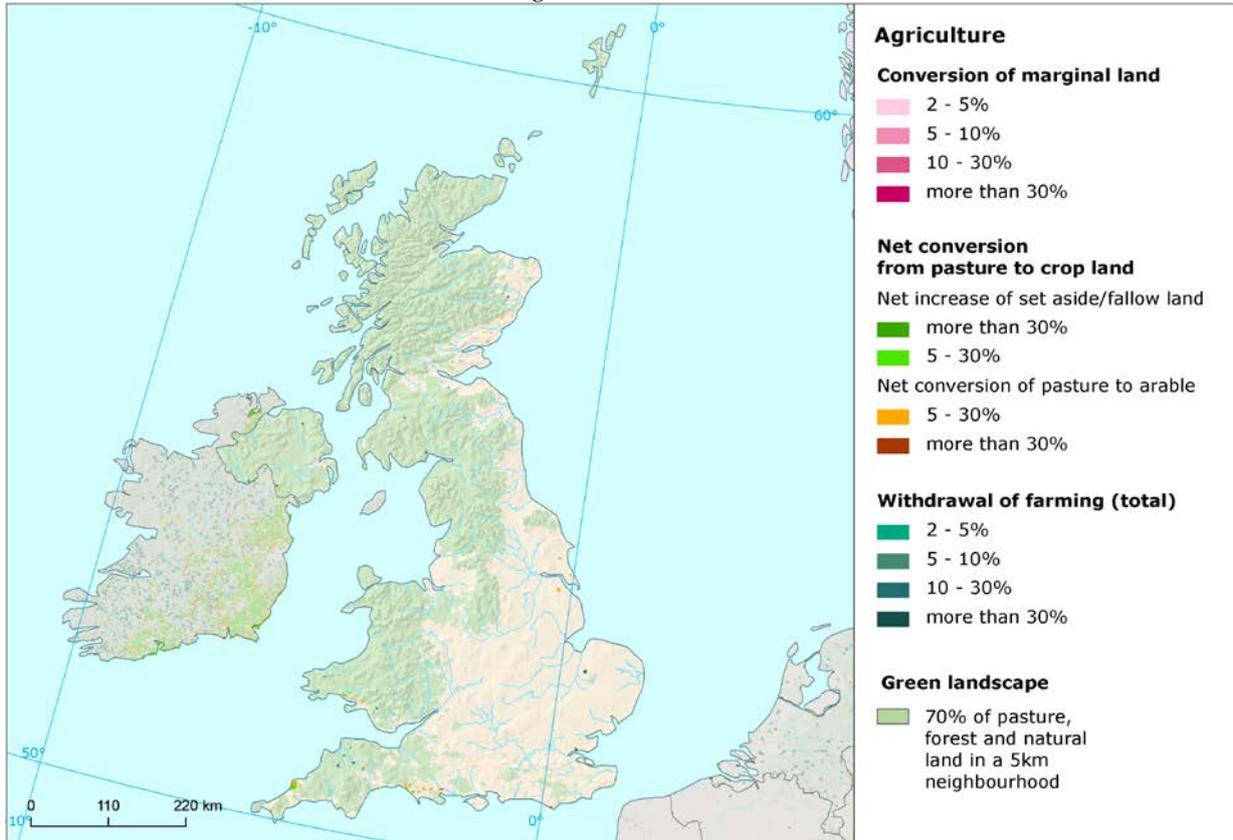


Artificial sprawl 2000-2006

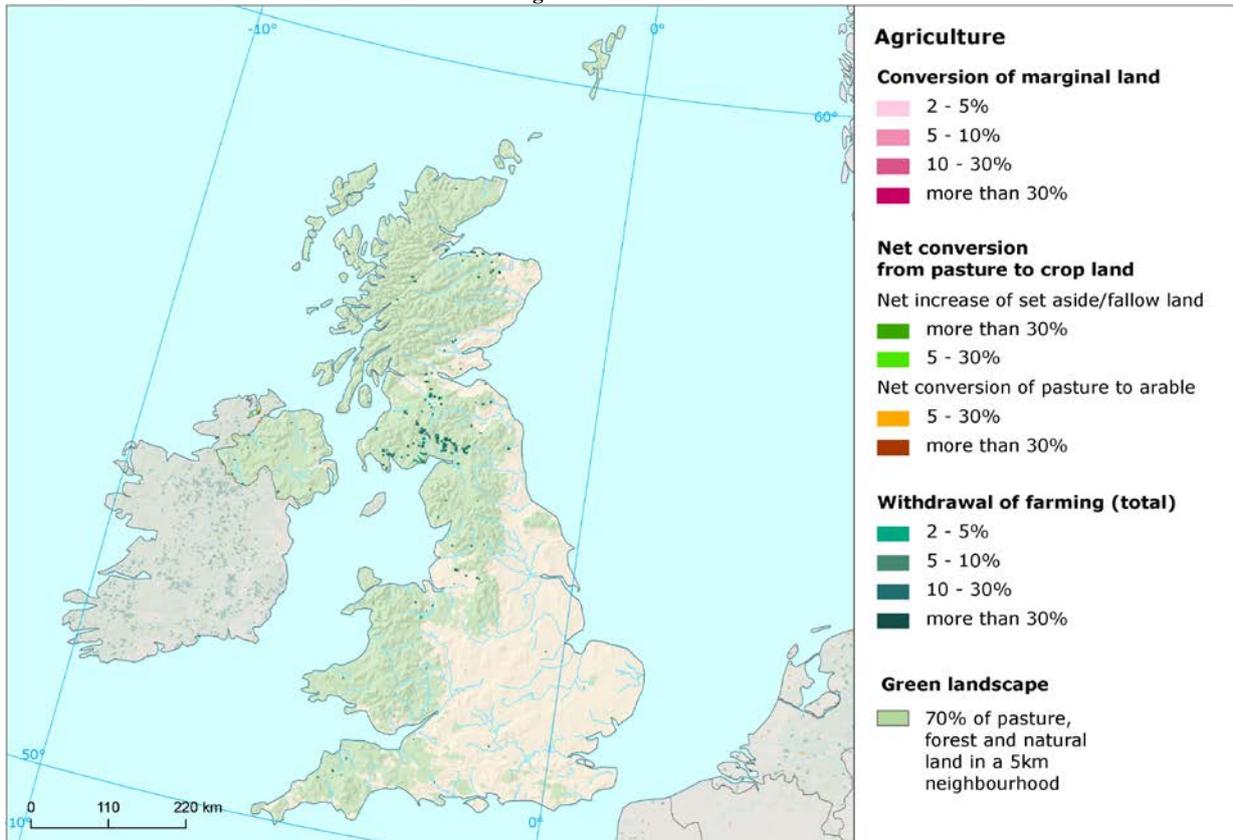


United Kingdom

Agriculture 2006-2012

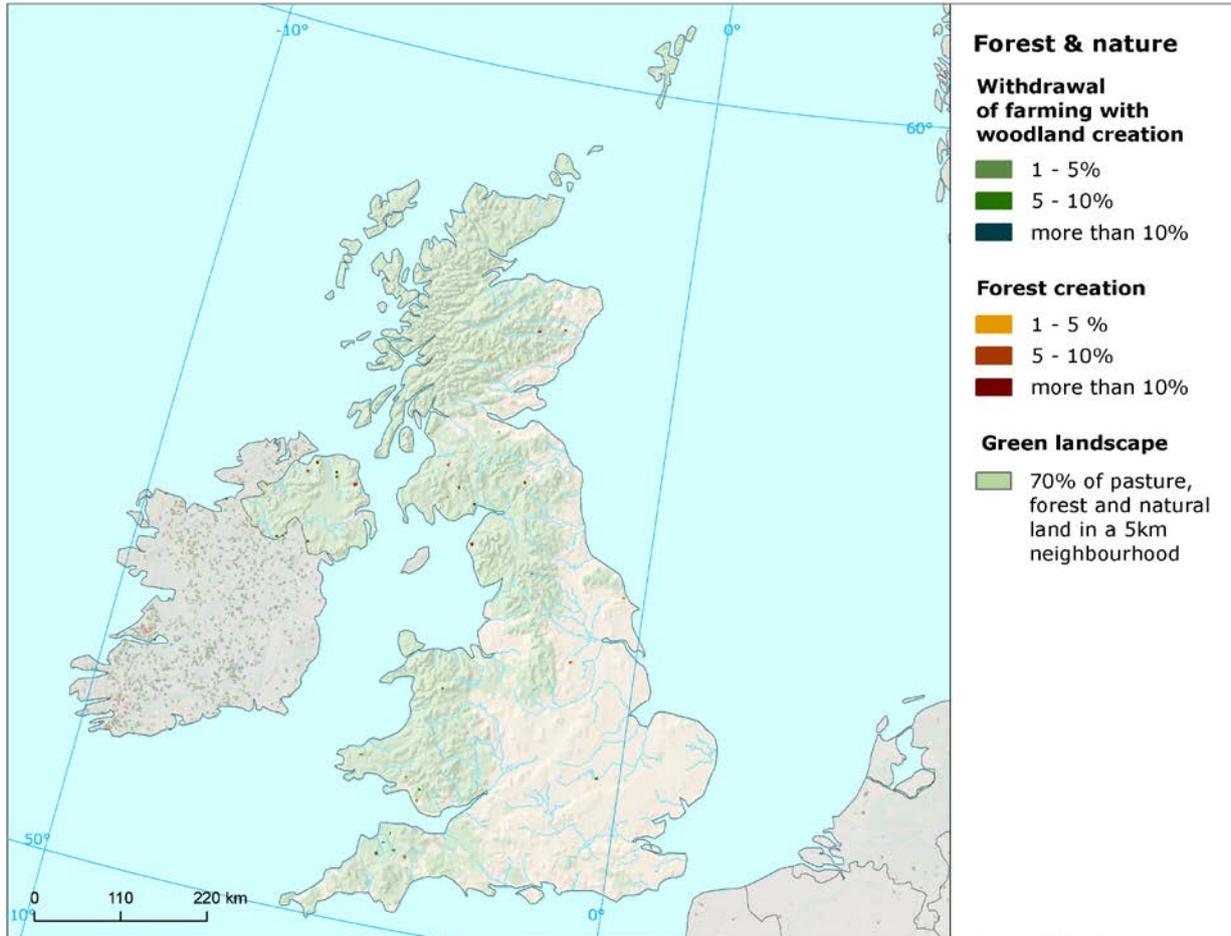


Agriculture 2000-2006



United Kingdom

Forest and nature 2006-2012



Forest and nature 2000-2006

