

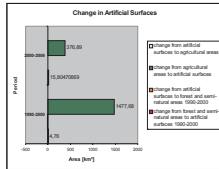
Tracking changes in LandUse / Land Cover based on CORINE Data 1990-2006

Key changes I: Extension of artificial surfaces: industrial, urban and sealed



The overview of the Change areas of CORINE 2000 and CORINE 2006 data indicates clearly the concentration in existing industrial regions.

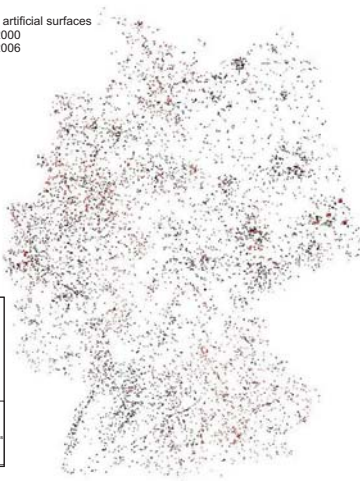
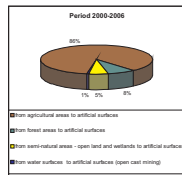
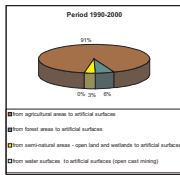
Legend:
land take for artificial surfaces
■ in 1990 - 2000
■ in 2000 - 2006



Category	2000-2006 Area (ha)	1990-2000 Area (ha)
from agricultural areas to artificial surfaces	126,00	126,00
from forest areas to artificial surfaces	126,00	126,00
from semi-natural areas - open land and wetlands to artificial surfaces	126,00	126,00
from water surfaces to artificial surfaces (open cast mining)	126,00	126,00
from other areas	126,00	126,00

Clearly dominates land take for built up areas in agricultural areas.
Forest areas, mostly on less fertile soils and unfavourable relief is untouched.

>> Loss of fertile soils and cultural landscapes!



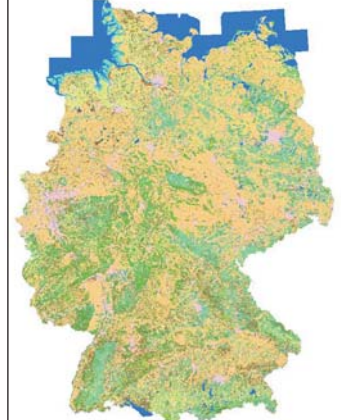
The CORINE (Coordinate Information on the Environment) data base is a common project of the EEA and its member states in the European environment information and observation network (EIONET).

The data base covers 29 European countries and many of them in all three time series of 1990, 2000 and 2006.

Product definitions:
Minimum Mapping Units 25 ha / 100m width
44 Legend classes
Accuracy required 85%

CORINE 2006 of Germany

Source: CORINE land Cover (CLC2006), Umweltbundesamt, DLR-D/DFD
CORINE Land Cover (CLC2000), Umweltbundesamt, DLR-D/DFD 2004
2009Datenart: clc2006_DE_gk3b



The information base CORINE 1990, 2000 and 2006, supported by thematic and local data, is used for geographical tracking land use / land cover changes in European regions and for supporting the analysis of causes and effects. Examples are:

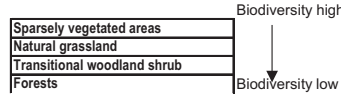
- Expansion of metropolitan regions and migration from less favorable regions.
- change of agricultural systems.
- abandoning specific land use systems.
- challenges of „energy landscapes“, „transformation landscapes“ and tourism,
- loss of biodiversity in cultural landscapes,
- threat to historical and extensive landscapes,
- expansion of natural landscapes and wilderness
- >> loss or gain of biodiversity.

Key changes II: Loss of open spaces:

inland dunes, sandy plains heathland and natural grassland



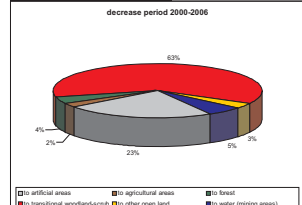
The change in areas of shrub und / or herbaceous vegetation associations and sparsely vegetated areas within the CORINE Data set can be seen as indicator for the transformation of landscapes.
The evolution going on from:



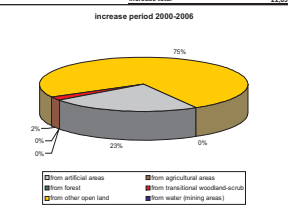
Changed areas of shrub und / or herbaceous vegetation associations and sparsely vegetated areas from CORINE 1990 till CORINE 2000

Legend:
land take for artificial surfaces
■ in 1990 - 2000
■ in 2000 - 2006

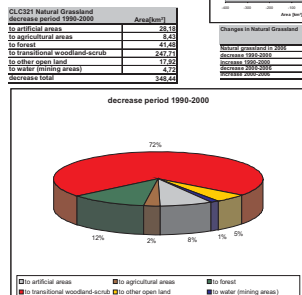
Category	Area (ha)
to artificial areas	4,90
to agricultural areas	0,10
to forest	1,10
to transitional woodland-scrub	17,60
to other open land	0,50
to water (inland areas)	1,70
increase total	28,90



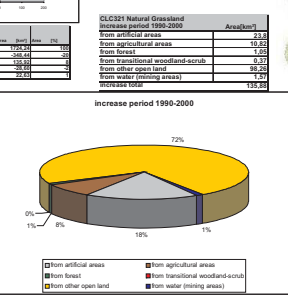
Category	Area (ha)
from artificial areas	4,51
from agricultural areas	0,00
from forest	0,00
from transitional woodland-scrub	15,00
from other open land	15,00
from water (inland areas)	0,00
increase total	29,51



Category	Area (ha)
to artificial areas	15,10
to agricultural areas	8,40
to forest	1,70
to transitional woodland-scrub	24,71
to other open land	17,20
to water (inland areas)	4,92
increase total	343,40



Category	Area (ha)
from artificial areas	10,30
from agricultural areas	10,30
from forest	1,00
from transitional woodland-scrub	0,10
from other open land	98,20
from water (inland areas)	0,00
increase total	130,30



Due to the decline of economy and the movement to economic prosperous regions the landscapes in the eastern parts are in transformation - and the extensively used biotopes are going to loose against the forest.

Former "Truppenübungsplatz Luckenwalde" in Corine 1990 and Corine 2006.

The CORINE data show clearly the increase in tree vegetation cover.
The sparsely vegetated areas dominantly developed through natural grassland to woodland. The rare biotope of >> sand plains and >> extensively used heathland and >> extensive grassland turned within 16 years dominantly to coniferous forest - definitely a loss of biodiversity.

Former military area Luckenwalde in Corine1990



Former military area Luckenwalde in Corine 2006



- Legend:
- broad-leaved forest
 - coniferous forest
 - mixed forest
 - natural grassland
 - moors and heathland
 - transitional woodland shrub
 - beaches, dunes and sand plains
 - bare rock
 - sparsely vegetated areas