

Areas remote from urban and transport pressures

Background

Assessment of sensitive areas (natural and semi-natural lands) remote from urban areas and transport infrastructures, so-called "areas of low pressure" . The map provides information about sensitive areas which are under pressure from human activity as well as identifies regions which are remote and large enough to act as a "safe heaven" for species.

These areas remote from pressure are important for nature conservation and biodiversity.

Methodology

Scientific references

None

Concept

The assessment of low pressure areas in all Europe was performed by combining the sensitive areas - see Table - with the two selected pressure types.

Major land cover type		Aggregation of CORINE Land Cover classes (short description and CORINE land cover code) :	value *)
1	Artificial territories	Urban fabric (1.1) + Industrial & units (1.2) + Mines & (1.3)	P
2	Vegetated areas, <u>strongly</u> artificial	Artificial non-agricultural vegetated areas (1.4) + Arable land (2.1) + Permanent crops (2.2) + Annual crops associated with permanent crops (2.4.1)	P
3	Vegetated areas, <u>less</u> artificial	Pastures (2.3) + Complex cultivation patterns (2.4.2) + Land & agriculture, with & natural vegetation (2.4.3) + Agro-forestry areas (2.4.4)	N
4	Forests	Forests (3.1)	S
5	Non-wooded semi-	Shrub and/or herbaceous vegetation	S

Major land cover type	Aggregation of CORINE Land Cover classes (short description and CORINE land cover code) :	value *)
natural areas	associations (3.2) + Open space with little or no vegetation (3.3)	
6	Wetlands Inland and Coastal wetlands (4.1 + 4.2)	S
7	Water surfaces Inland waters (5.1) + Coastal lagoons (5.2.1) + Estuaries (5.2.2)	N
---	(not considered) Sea and ocean (5.2.3)	-

Table. Major land cover types , CORINE land cover classes and value (neutral, sensitive or pressure) EEA-European Topic Centre on Nature Conservation-European Topic Centre on Land Cover, 1997

*) Value: P = putting Pressure to the adjacent area, and contributing to fragmentation; N = Neutral; S = being Sensitive to pressure, these areas are considered to be potentially (semi-)natural.

The following pressure types which impact on the sensitive areas were analysed:

- urban areas - as defined by CORINE land cover class 1
- existing transport network - defined by roads of more than 2 lanes for each direction and . main railways. , both data sets derived from the GISCO road and railway data sets

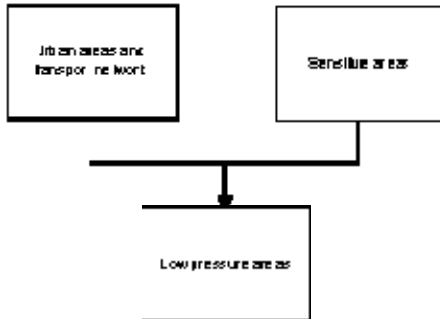
The urban areas were identified from the extended CORINE land cover database, the transport network from GISCO data. A buffer of 500 m was calculated around each pressure type to illustrate its sphere of influence on neighbouring areas.

The low pressure areas are only assessed by cartographic representation, no statistical calculation is performed.

Data input

The major land cover types were used for the identification of the sensitive areas. LCEUGR250 was used to identify the urban areas. The GISCO road database (existing roads, all categories) was used to identify the road network.

Actions



Step 1:

Identification of sensitive areas from the major land cover types. The sensitive and neutral areas are identified from Table 7. A new grid data set has been created.

Step 2:

The urban areas were selected from LCEUGR250 and a new coverage was created. The CORINE land cover classes included in the selection for the urban area are:

CLC class	CLC name
1.1	Urban Fabric
1.2	Industrial, commercial and transport units
1.3	Mine, dump and construction site
1.4	Artificial, non-agricultural vegetated areas

Step 3:

Creation of a 500 m buffer around all urban areas in a new data set.

Step 4:

The main roads and railways were selected from the GISCO database (coverages: RDEU1MV3 and RWEU1MV3). Only existing links are considered, the planned TEN network is excluded from the analysis. The selection criteria were the following:

Roads

RDSGTP	RDSGNM
D	Dual carriage way
DE	Dual carriage way, European
M	Motorway
ME	Motorway, European

Railways

RWSGTP	RWSGNM
MD	Main line, double track
MDE	Main line, double track, electrified
MS	Main line, single track
MSE	Main line, single track, electrified

Step 5:

The selected railways and roads were put in the same coverage and were buffered with a 500 m buffer.

Step 6:

The map was made by drawing all the sensitive areas (grid data) first. On top, the urban areas and the transport network (road and railway) including the 500m buffer, were drawn in red.

Created data sets:

- sensitive areas (grid data set)
- urban area, including a 500 m buffer
- transport network, including a 500 m buffer