

2-2 LAND FRAGMENTATION

Land fragmentation results from the compartmentalization of continuous natural habitat through “ecological barriers” (roads, railways, built-up areas, intensively farmed agricultural areas, etc.). This in turn leads to a reduction in the area available as a natural habitat and to increased species isolation, and contributes to the increasing erosion of biodiversity.

KEY MESSAGE

The degree of fragmentation in Wallonia has been estimated¹ on the basis of the Jaeger index² applied to environments favourable to biodiversity³. The more barriers compartmentalizing the land, the more the land is fragmented and the lower the index. The average index value in Wallonia shows considerable disparities from one region to another. While the loamy and sandy-loamy regions had the highest degree of fragmentation in 2007 (average index values of 8 and 10 ha, respectively), the Ardennes, Famenne and Belgian Lorraine had lower degrees of fragmentation⁴. Furthermore, even within natural regions, the degree of fragmentation can vary considerably⁴. Between 2001 and 2007, the average degree of fragmentation in Wallonia increased by 5.4%, with the average index value dropping from 90 to 85 ha, whereas the median index value remained stable (± 15 ha). The contrasting development of these two statistical parameters indicates very localised degradations to ecological connections within large areas with good biodiversity.

Evaluation

Unfavourable and broadly stable situation

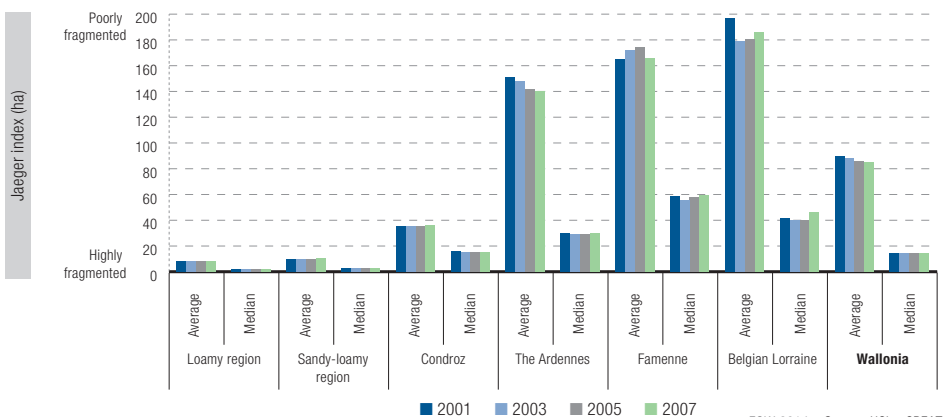
[1] See UCL-CREAT (2010 and 2014) for details on the calculation of the index

[2] Index which takes into account the probability that two points chosen randomly in an area are connected, i.e. they are not separated by any “ecological barrier”

[3] Scenario in which built-up land and farmland, coniferous forests, low-stem orchards and water courses are regarded as “ecological barriers”

[4] → Map 2

Fig. 2-2 Fragmentation of natural regions in Wallonia



EOW 2014 – Source: UCL - CREAT