



Urban land use in Natura 2000 surrounding areas in Vilnius Region, Lithuania.

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Urban development is one of the major causes of land degradation and pressure on protected areas. (Hansen and DeFries, 2007; Salvati and Sabbi, 2011). The urban areas in the fringe of the protected areas are a source of pollutants considered a negative disturbance to the ecosystems services and biodiversity within the protected areas. The distance between urban and protected areas is decreasing and in the future it is estimated that 88% of the world protected areas will be affected by urban growth (McDonald et al., 2008). The surrounding or buffer areas, are lands adjacent to the Natura 2000 territories, which aim to reduce the human influence within the protected areas. Presently there is no common definition of buffer area it is not clear among stakeholders (Van Dasselaaar, 2013). The objective of this work is to identify the urban land use in the Natura 2000 areas in Vilnius region, Lithuania. Data from Natura 2000 areas and urban land use (Corine Land Cover 2006) in Vilnius region were collected in the European Environmental Agency website (<http://www.eea.europa.eu/>). In the surroundings of each Natura 2000 site, we identified the urban land use at the distances of 500, 1000 and 1500 m. The Natura 2000 sites and the urban areas occupied a total of 13.2% and 3.4% of Vilnius region, respectively. However, the urban areas are very dispersed in the territory, especially in the surroundings of Vilnius, which since the end of the XX century is growing (Pereira et al., 2014). This can represent a major threat to Natura 2000 areas ecosystem services quality and biodiversity. Overall, urban areas occupied approximately 50 km², in the buffer area of 500 m, 95 km² in buffer area of 1000 m and 131 km² in the buffer area of 1500 km². This shows that Natura 2000 surrounding areas in Vilnius region are subjected to a high urban pressure. This is especially evident in the Vilnius city and is a consequence of the uncontrolled urban development. The lack of a clear legislation regarding the land use of the Natura 2000 buffer areas is contributing to the degradation of the services provide by these areas.

Acknowledgments

RECARE (Preventing and Remediating Degradation of Soils in Europe Through Land Care, FP7-ENV-2013-TWO STAGE), funded by the European Commission, for the COST action ES1306 (Connecting European connectivity research) and COST Action IS1204 Tourism, Wellbeing and Ecosystem Services (TOBeWELL)

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