



Habitat fragmentation in Les Gavarres, the Area of Natural Interest in Catalonia (Spain).

M. Szek

X. Ubeda

Institute of Geography and History, University of Barcelona, Spain, Department of Physical Geography, Montalegre street 6, 08001 Barcelona, Spain

0.1 mariola.szek@gmail.com

Mediterranean region has induced severe changes in the main natural forest ecosystems.

Following the human expansion, much of this area was converted to human land uses, such as agricultural fields, residential neighborhoods, industrial and urban areas. Therefore, the present day landscape the human occupies consist of patches of relatively natural habitat interspersed among a matrix of human land uses. This cause the process of forest and habitat fragmentation.

Generally, habitat fragmentation is a global issue that involves the subdivision of stand of habitat into a landscape mosaic consisting of modified environments and residual stand of remnant vegetation. While fragmentation is a frequent consequence of habitat loss, the ecological effects results in serious damage to ecosystems are distinct. The continued expansion of urbanized areas and associated infrastructure interrupts water-courses, alters natural landscape patterns, and increases the proportion of edge habitat affect in a number of ecosystem changes.

It is generally perceived that biodiversity is better protected from human activities when an area is designated as a protected area. That's why the declaration of protected

areas is the most important policy instrument in nature conservation worldwide.

The problem of habitat fragmentation is presented in “Les Gavarres”, the Area of Natural Interest in Catalonia (Spain). This forest area, funding from public and private institutions, is dominated by forests of holm and cork oak and pines. In this area private property is relevant.

The study compared deforestation rates and the extent of fragmentation inside and outside protected area. It was necessary to determine deforestation rates using remotely sensed images with supervised classification.