

## **Project Update: June 2005**

According to our main objective, we must define what landscape elements and the configuration of these elements are most beneficial for bird (and biodiversity) conservation. Thus, a first step in this process is creating a land use/land cover map for the region, from where we will identify landscape types. The land use/land cover map has been created, and we have developed a method for landscape characterization. This method first consists of creating a grid of 1km<sup>2</sup>-hexagons, and intersecting the land use/land cover map with this grid. Once each hexagon can be treated independently as a landscape unit, with its unique subset of landscape patches, indices that quantify landscape composition and configuration are calculated for each hexagon.

These quantify the area and number of patches, variation in patch size, patch shape, patch connectivity and patch juxtaposition for each habitat class. Thus, we will have all of these indices calculated for each land use class in each hexagon. The hexagons are then classified by cluster analysis, which basically groups elements based on a previous calculation of their similarities. This methodology will then permit us to create a bird sampling protocol that will adequately sample all landscape types with an equal effort in each. A copy of the land use/land cover map created is available for viewing at:[http://www.ruffordsmallgrants.org/Projects/reports/Land\\_use-landcover\\_A...](http://www.ruffordsmallgrants.org/Projects/reports/Land_use-landcover_A...)