



Characterizing the changes in landscape structure in the Province of Viterbo (central Italy) using a high-quality GIS dataset

Fabio Recanatersi and Michela Tolli

Tuscia University, Environment and Forestry Department, Engineering Group (fabio.rec@unitus.it)

The present study analyses the landscape evolution on wild area, through the determination of the environment fragmentation and the application of metric indices developed from the landscape ecology using time series high-quality GIS dataset. We have been employed, to such aim, two temporal scenes of land use (1950 and 2000) that analysed through the methodology previewed from the change detection it has concurred to determine the evolution temporal space of the landscape. For a quantification of patch scale of such process we have been employed some important metric indices developed from the landscape ecology that, in theirs with, an exhaustive analysis of such process has concurred. Particular attention has been turned to the practicability analysing a third scene, year 1850, that it has concurred to analyse the study area in an antecedent historical period to the radical changes associate - cultural that have been taken place in the arc of XX century. From the moment that this infrastructure is thought a member that more than others it is in charge of the fragmentation phenomena, and therefore of the evolution of the landscaped matrix, we have been determined the main inherent parameters the density and the amplitude of the mesh. The study area has interested the Province of Viterbo (high Lazio).