



Preservation of the Adriatic urban forest. The case of study of the coastal pine forest

The coastal pine forests are the most important forestry formations in the littoral areas of Italy. In the central Adriatic coast, the presence of two pine species, *Pinus pinea* L. and *Pinus halepensis* Mill. creates a particular urban forest area, perfectly integrated in the city structure. According to our study, the forest ecosystem has been evaluated in 130 km of coast that represent the most extended area of urban pine forest in the Adriatic coast of Italy. This area contains single forest formations belonging to 16 districts of Marche and Abruzzo region, that forms altogether 69 ha (170 acre) of coastal pine forest extended for 15 km. His particular position in the urban structure creates a real urban forest, unique in the Adriatic coast. It's near the sea, the residential and tourist activities and transport infrastructure (roads, railway, bike roads) that over the years have grown around it. The 16-pine forest represent a single piece of a larger urban mosaic that can be considered a real urban forest in a highly urbanized city tissue. However, in the Adriatic urban forest there are several problems related to the biological and static features that influence the global quality. These problems arise mainly from a no/minimum forest management by the public ownership that generates a loss of urban forest value. In order to preserve it, we carried out some studies for the evaluation of several problems and the planning of the best management activities. An example is the "Management plan of the coastal pine forest" of Alba Adriatica (2,3 ha, 1.900 plants). Conducing a census, georeferencing, bio-static measurement of each plant, we created a specific framing of the forest. After the bio-static evaluation we generated the final report of the bio-static classes. Consequently, we'll be able to plan over the years the main activities required to reduce the principal risk, overcome the problems and preserve the value of urban forest. Integrated in this process, we are developing a permanent formation and update system for workers, in order to provide technical knowledge for the management of pine forests. This approach, replicable in other contexts, especially in urban forest areas with a fragmentation of the tissue, can respond to the various challenges and increase the value of the global urban forest formation as an important part of urban structure.