Building Monumental Tree Inventory Using Geographical Information System

Asli Sabuncu, Asli Dogru, Haluk Ozener, Bulent Turgut and Kerem Halicioglu (Turkey)

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SUMMARY

Forests are the significant part of the sustainable natural resources all around the world. They cover approximately 30% of the Earth's land surface. Although they provide food, water and shelter for human and animals and raw materials for industry needs most of them poorly recognized. Monumental trees have much larger size than the common size of their species in terms of age, diameter and height. They have a special place in the history and culture. They are naturally old enough to provide communication between past to present and also present to future. Numerous monumental trees have been identified and conserved all around the world today. In the last three decades, information technologies have important effects on research techniques specific to geography. GIS collect, store and retrieve data, transform and display them for a specific set of aims. This study was performed at kandilli Campus of Bogazici University in Istanbul Turkey. This campus is home to Kandilli Observatory which was built in 1868 and later became part of the University in 1982. The aim of the study is to collect the monumental trees data from the field and build a database using GIS. We used GPS and sometimes Total Station to collect tree data and ArcGIS to create database. With continuosly updated information, this GIS database can become an important tool in the planning and development of all campuses of Bogazici University's located at different amazing regions of Istanbul.