



Effects of Turkish forest management philosophy and applications on forest ecosystem structure and functions in Northeast Turkey: A case study in Saçinka Forest Management Planning Unit

<http://www.firstlight.cn> 2009-04-01

Nowadays, Turkish forest management philosophy has changed from timber management to ecosystem-based multiple-use forest planning (EBMUFM) with the principles of “sustainable forest management” criteria and indicators drafted in a few national and international agreements. This study analyzed the temporal changes in forest ecosystem structure and a few forest values such as tree species, distribution of age class, development stage, canopy closure, species mixture, timber volume and increment, carbon storage and oxygen production in Saçinka Forest Planning Unit in the northeast corner of Turkey. To assess the patterns during a 21-year period (1985-2006), the necessary data were obtained from forest stand maps and evaluated with Geographical Information Systems (GIS). Results showed that the decrease of agricultural and settlement areas caused the increase of productive forests and the decrease of degraded forests. Bark beetles, which have common effect in Artvin, had less effect on the vitality of Saçinka Forest Planning Unit forests compared to the neighboring forest ecosystem. This forest ecosystem vitality and integrity level was a result of the mechanic and biological interventions against the beetle damages and appropriate silvicultural prescriptions.

[存档文本](#)