

Effects of forest roads on wildlife

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Abstract: Forest roads are the most important infrastructural facilities to exploit forests that are renewable natural resources. A road network that leads us to our goals needs to be established in order to plan forestry activities sustainably. Despite the benefits of forest roads, they have great potential to cause degradation and fragmentation effects on ecological. Ecological impacts of forest roads are effects during the construction, short term or long term effects. For example: loss of habitat and biota, accidental animal deaths by traffic. The loss of habitat and change in habitat extends beyond the edge of the road. The roads affect the wild animals in four ways: (1) reducing the quantity and quality of habitats, (2) causing deaths, (3) not reaching the remaining habitat resources on the other side of the road, and (4) causing smaller populations of animal populations and cutting off gene flow. Big mammals are at the forefront of the species that are adversely affected by their path because of their ecological needs. Emissions, litter, noise and other physical disturbances may extend into the roadside vegetation for varying distances and result in changes in species composition. The aim of the current study is to carry out effects of forest roads on wildlife. It was made observations by wildlife camera traps from fixed points the forest roads. The image ratio (DR) ((Number of images / Number of view days) x100) was calculated from images obtained from camera traps points. The number of species at each spot and the rate of display of species were classified according to the time of the month and forestry activity. Minimizing negative effects of the ways was specified at forest roads planning and construction process.

Keywords: Roads, Big mammals, Aksu Region, Düzce