This study assessed the impacts of logging on the population structure and dynamics of Elgon teak (*Olea capensis*), a canopy dominant in Kakamega forest. The objective was to ascertain and determine the regeneration status of this tree species in view of its commercial value. A comparison was made between logged and unlogged sections at three sites in the forest. Pairwise comparisons of the differences in the population structure among three sites and the differences in the mean tree size revealed significant differences in all three study sites. Results also revealed a variation in stem density that was dependent on the block of forest under study. Results of the spatial contagion revealed that *O. capensis* had a varied clumped distribution in all the study sites. Clumping was highest in the Kisere forest. These results point to logging as the major factor that explains the differences in population structure and stem density in different parts of Kakamega forest. And while intermittent recruitment may explain clumped distribution, logging appears to explain the variation in the degree of clumping.