Four road counts and four series of daily road counts of 28.4% sampling intensity were carried out at Wildlife Ranching and Research Ltd (WRR), Athi River, Kenya, between December 1966 and July 1987 to test the applicability of the method to the WRR environment. The results, however, exhibited high variation. Difficulties were encountered when applying the Anderson & Pospahala (1970) method to detect the existence of visibility bias in the distribution of Thomson's gazelle. An alternative approach, based on the regression of group size on the right angle sighting distance was applied to detect the existence of visibility bias.