Abstract

The research of factors influencing bird’s species diversity and abundance will allow us to manage the landscape in the way to create suitable conditions for survival of species. For the purposes of this work, I divided bird assemblages into 3 groups on local level: forest birds, shrubland birds and grassland birds. The forest bird species were most influenced by height of canopy, its compactness and fragmentation of the forests. The size of the fragment, fragment matrix, isolation of the fragment and birds sensitivity to edge effect were deciding factors of number of species and individuals in each fragment. The shrubland birds were most influenced by vegetation structure in meaning of presence of shrubs, trees and grassland. They were also influenced by vegetation species composition, frequency and form of disturbances (fire, grazing), they reacted positively to transformation of landscape into agroecosystems and they reacted negatively to shrub encroachment. Grassland birds reacted to various height of grass, they reacted negatively to presence of trees and shrubs and also to disturbances caused by human. It is the least studied group of birds in Africa. As for the elevation gradient, the lowland assemblages of birds changed to mountains assemblages at attitude of about 1250 above the sea level, but there are not enough information and another research of this topic is necessary.

Keywords:

sub-Saharan Africa, birds, species diversity, abundance, environmental gradients