An ecologo-biological characteristic of the natural steppe biogeocenosis components in Kabardino-Balkaria (within the Terskiy variant of vertical zonation) is given. The research results of biological features of common chernozem calcareous soils (humus contents, enzymatic activity, and soil respiration intensity), their spatial and profile distribution combined with basic ecological factors are represented. A list of abundant plant species and their ecological characteristics are given; the specific composition and abundance of mesofauna representatives (earthworms) in the area of common chernozem soils were studied.