

Abstract

There are some beliefs about the abundance and biomass of different animal groups, which persist in general awareness. At the same time, the ideas of the general public relate to the influence and importance of the animals for an ecosystem. The aim of this paper is to make sure that these assumed concepts of dominating entities are based on truth or if they are only mistaken rumors, and to answer the following questions: whether the biomass of large herbivores or termites is significant in the tropics, what is their influence on decomposition of vegetation matter; if the biomass of all ants actually exceeds the biomass of all people in the world; whether the abundance of prey and predators is stable across ecosystems; if there are more herbivores in tropical or cold ecosystems; or when predominant abundance of ants or termites is present in tropical ecosystems. Responses are gained through the extensive collection of abundance and animal biomass data from expert articles and publications. In order to be verifiable as well as the stability of the given ratios over the years, there were used data from the oldest traceable materials about 80 years old to the current data from current works. In addition to biomass and abundance values, attention is also paid to the methods used by scientists to collate data. Often, they are very different between groups. This is due to the different types and lifestyles of the compared groups. Effectiveness, complexity and reliability of these methods are considered. Values, together with methods are summed up into complete results that are compared and critically evaluated.