**FOREST BIOTIC COMMUNITY AS A REPRESENTATION OF POPULATION**

(Ecology of the forest, forest biotic community), species forming the forest biotic community are represented by populations of individuals capable of associating with each other and producing fertile offspring. The growth of populations of individual species in forest biotic communities, however, does not occur in an unlimited manner. After reaching equilibrium density, at which mortality balances reproduction, the size of the population remains at a level corresponding to the capacity of the environment (the sum of ecological niches available to individuals of a given species). This capacity fluctuates within certain limits, depending, for example, on the availability of food or more or less favorable abiotic conditions, which consequently causes fluctuations in population size and area. Various interactions are observed among individuals forming the population. Most often, this is competition, as individuals of the same species have similar requirements and use the same, limited environmental resources. Competition among individuals is the main cause of self-thinning of the stand, as well as the elimination of the young generation of trees within the range of influence of the crowns and root systems of mother trees. In animals, intensified competition forces weaker individuals to leave the territory occupied by the population. Another interaction of the same species is cooperation. In trees, growing especially in unfavorable environmental conditions, it manifests itself, for example, in the formation of clumps. Trees in a clump are often joined by roots and form a common crown. Such clumps are more resistant to herbivore pressure in their youth and to the harmful effects of wind in old age. Cooperation in a group is a common phenomenon among animals. An example may be the cooperation of individuals in caring for offspring or the cooperation of predators during hunting. In some populations of forest animals, the phenomenon of altruism is also observed, consisting of some individuals foregoing reproduction (and even survival) to increase the chances of other individuals in the population. Examples include infertile workers in ant or bee populations, sacrificing their reproductive abilities and caring for a specialized reproduction queen. Interactions among individuals and the regulation of the size and area of populations of individual species are of great importance for maintaining dynamic equilibrium in forest biotic communities.