

This diploma thesis is devoted to the sampling strategies in forestry. It describes their theoretical aspects and their applications on a real landscape. The sampling methods in forestry are of particular importance in forest inventory. The aim of sampling methods is to estimate population characteristics based on the knowledge of sample. Two basic approaches can be distinguished according to the size of population, we speak about discrete or continuous population. Several types of sampling designs and corresponding estimators of target values are described for both approaches. Besides estimates of population total or average, we mention the formulas for computing variance of these estimates and the methods for their estimation for different sampling designs. The thesis also contains the comparison of studied methods based on computer simulations.