

Despite of numerous researches conducted to date, the influence of animal movements on forest regeneration at small spatial scales is not completely understood. Dead wood is an essential element of the forest ecosystem with great importance as habitat, movement corridor and foraging site. Dead wood laying on the ground, known as coarse woody debris (CWD), is known to have particularly high importance. To study the effect of presence of single debris and their spatial arrangement on functions of forest ecosystems, we will focus on small mammals and birds. By analyses of animals' movements from different ecological groups and interactions that take place between them, we will investigate seed removal and seedlings growth in increasing distance from CWD. The main method to collect data will be camera trapping. The study will be conducted on 180 circular plots, where the effect of presence/absence of CWD, canopy closure, debris species (i.e.: European beech and silver fir) and decomposition stage will be investigated in increasing distance from CWD. We expect to find that CWD are favourite locations for selected species of mammals and birds using it as movement corridor and foraging site. The predicted consequences of this preference will be higher rate of seeds removal in decreasing distance to CWD. Due to the higher frequency of insectivores around debris objects, we also expect a lower impact of herbivores invertebrates on seedlings in the proximity of CWD. Results of the research are expected to be applied in effective forest management, where natural regeneration of forest tree species along CWD will be used as preferred regeneration method.