Analyse the dataset SeedPred contained in the package emdbook, data on seed predation from Duncan and Duncan (2000) that quantify how many times seeds of two different species disappeared (presumably taken by seed predators) from observation stations in Kibale National Park, Uganda. The two species (actually the smallest- and largest-seeded species of a set of eight species) are Polyscias fulva (pol: seed mass < 0.01 g) and Pseudospondias microcarpa (psd: seed mass 50 g).

The main questions to address are: does the probability of seed removal vary as a function of distance from the forest edge (10 or 25 m)? Does it depend on species, possibly as a function of seed mass? On time?

It must be remembered that the numbers of seeds present in each location is small: 5 initially, then fewer as some are predated. The variable available indicates how many seeds were available at each time and station to be predated; of course, the observations with available= 0 do not give any information.

Hence, the first question to address is the distribution of seeds removed; can it be fitted with the binomial distribution?

The book by Bolker gives many ideas about the analysis, but of course I expect that you develop your own code.