Tricia Phillips* (tmphilli@bsc.edu), Suzanne Lenhart, W. Christopher Strickland and Orou Gaoue. Modeling Lethal and Non-lethal Harvest of African Mahogany. Preliminary report.

Khaya senegalensis (African Mahogany) is a tree species in Western Africa that is harvested non-lethally for its non-timber forest products, as well as lethally. A preliminary report will be given on the formulation of a size-structured, seasonal system of difference equations with time-varying lethal and non-lethal harvest for this tree species. An application of this model to the Soassararou population will be discussed in order to better understand the effects of harvesting on these trees. (Received September 10, 2020)