

OBSERVATIONS ON MOVEMENT OF TWO-TOED SLOTHS IN A REDUCED HABITAT ADJACENT TO A CACAO PLANTATION IN NORTHEASTERN COSTA RICA

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Sloths are arboreal mammals that are strictly dependent on forested habitats. However, past studies have suggested that managed environments such as agro forestry systems can play an important part in maintaining mammal biodiversity in human modified landscapes. Much of the coastal plains in Costa Rica have been converted to areas of agricultural production that led to mammals such as sloths to live in areas that have been deforested. In cattle pastures at the entrance to the FINMAC cacao plantation in Limon province, Costa Rica, sloths can be found adapting to a habitat with isolated trees. A sloth group of two males and two females and another group of a male and female were observed during an 8-week period. The two females in the first group also had a young each during the study. I observed the movement of individual sloths to determine possible reduced movement in areas of limited tree availability. I located each sloth twice daily and recorded its location and behavior. Differences in home ranges were compared with total behavior, types of activity during different types of climate, and tree species used by individual sloths were also observed. No relationship was found between total number of trees in each individual's home range and total amount of individual movement ($P=0.1983$). The more sloths moved within a tree the more each individual sloth relocated to a differed tree ($P=0.0069$). There was a relationship between total amount of trees visited by sloths and total amount of movement done by each individual sloth ($P=0.0945$). However, no strong relationship existed between the individuals' home range size with its total movement ($P=0.2146$). There was variety between each of the sloth's study-long home range. Different tree species were preferred by each individual sloth. There was also more movement observed during sunny and partially cloudy days.