Plant-mammal interactions in tropical Bolivian forests with different hunting

pressures

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We studied plant-animal interactions and vegetation structure in two geographically close tropical Bolivian forests subjected to different hunting intensities. We hypothesized that reduction of mammals of > 1 kg in an "intensively hunted forest," compared with an "occasionally hunted forest," should correlate with decreased seed predation and seedling trampling, increased seedling survival and density, and decreased tree-species diversity at the seedling stage in relation to the adult stage. The occasionally hunted forest held 1.7 times as many mammalian species as the intensively hunted forest. As predicted, predation of Astrocaryum murumuru seeds was 34.2% lower in the intensively hunted forest. Similarly, trampling of model seedlings was 5.4 times lower and seedling survival was 1.15 times greater in the intensively hunted forest than that in the occasionally hunted forest. But the intensively hunted forest displayed lower seedling densities and a higher ratio of seedling diversity