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Poster Abstract

Effects of elephants on vegetation along a fenceline contrast in South Africa

We assessed the degree of damage of two common plant species, marula *Sclerocarya birrea* and the mountain aloe or flat-flowered aloe *Aloe marlothii* in two neighboring game reserves along a fenceline with respect to the presence of African elephants *Loxodonta africana*. One of these reserves, Thornybush, had 40-50 elephants while the other reserve, the Wits Rural facility, contained no elephants, although elephants had broken into a select region briefly during a recent drought. We measured the browse height of *S. birrea* relative to overall tree height and trunk circumference to establish the differences among the three different areas. We also measured the presence/absence of *A. marlothii* in these game reserves. We found no *A. marlothii* in the reserve with elephants, while this plant species was quite common where there were no elephants, despite the absence of soil differences. In the section of the Wits Rural facility where the elephants had broken in, there were considerably more damaged *A. marlothii* than in the section of this reserve without elephants. We also established the association between the size of the aloe and elephant consumption.