1 **Elephant rewilding affects landscape openness and fauna habitat across a 92-year period**

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13 *Appendix S8*

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Appendix S8. Description of the protocol used to construct Figure 5.

Section S1: A description of the protocol used to weight the number and size of polygons representing different ecological responses associated with landscape openness and fauna habitat in Figure 5 (top row).

For each panel representing different elephant reintroduction times in Figure 3 (left to right: no elephants, 2003 and 1995 together, 1972, 1927), the number of trees, trees bearing small- and large-sized hollows, woody plants and small- and large-sized coarse woody debris items were weighted by the mean predictions from the Bayesian mixed-effects models within the "Ecological responses to elephant reintroduction time section" of the manuscript (Figure 1 of manuscript).

1) Tree density represents the mean predicted number of individuals per reserve per 10 ha from the Bayesian posterior predictions, when compared with the reserve without elephants where 20 trees were allowed.

2) Woody plant density represents the mean predicted number of individuals per reserve per 0.05 ha from the Bayesian posterior predictions, when compared with the reserve without elephants where 20 woody plants were allowed. The size of woody plant polygons represented the mean size of woody plant canopies per reserve per 0.05 ha from the Bayesian posterior predictions, when compared with the reserve without elephants.

3) The proportion of trees in 1) bearing small-sized hollows was assessed by dividing the mean number of trees bearing small-size hollows per reserve per 10 ha by the mean number of trees per reserve per 10 ha from the Bayesian posterior predictions, then multiplying this by the number of trees within each panel (representing different elephant reintroduction times) from 1).

39   4) The proportion of trees in 1) bearing large-sized hollows was assessed by multiplying the

40   number of trees within each panel (representing different elephant reintroduction times)

41   from 1) by the mean predicted probability of observing a tree with a large sized hollow per

42   reserve per 10 ha from the Bayesian posterior predictions.

43   5) The number of small-sized coarse woody debris (CWD) items was assessed by dividing the

44   mean number of small-sized CWD items per reserve per site from the Bayesian posterior

45   predictions by the total number of possible CWD intercepts per site (150), multiplied by 74.

46   74 represents the maximum number of small-sized ground wood items observed across the

47   field sites.

48   6) The number of large-sized CWD items was assessed by multiplying the predicted

49   probability of observing a large-sized CWD item per reserve per site from the Bayesian

50   posterior predictions by 15. 15 represents the maximum number of large-sized ground wood

51   items observed across the field sites.