

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

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13 ***Appendix S6***

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21 **Appendix S6. Methods used to sample the values shown in Table 1.**

22 **Section S1:** Description of methods.

23 Elephant density was estimated in the dry season using aerial census counts for Balule Nature  
24 Reserve, Klaserie Private Nature Reserve and Greater Makalali Private Nature Reserve between  
25 2014 – 2018 and the central region of Kruger National Park (5493km<sup>2</sup>) between 1998 – 2012  
26 (Robson and van Aarde 2018). Mean annual precipitation (MAP) and mean precipitation in the  
27 wettest month (MPWM) was sampled from ARFICLIM (~9 km resolution; Platts et al. 2015).  
28 Elevation was sampled from Shuttle Radar Topography Mission data using the USGS's Earth  
29 Explorer interface (30 m resolution). The distance to the closest persistent water source (Distance to  
30 water) was sampled from the Global Surface Water database's occurrence layer (~25 m resolution;  
31 Pekel et al. 2016). To account for variability between seasons and years, we defined persistent water  
32 as areas where water was observed on > 20 % of monthly satellite images between 1984 – 2016.  
33 Fire frequency (~450 m resolution) between 2000 and 2016 was estimated using data layers derived  
34 from MODIS satellite imagery (Giglio et al. 2015).

35 *References*

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