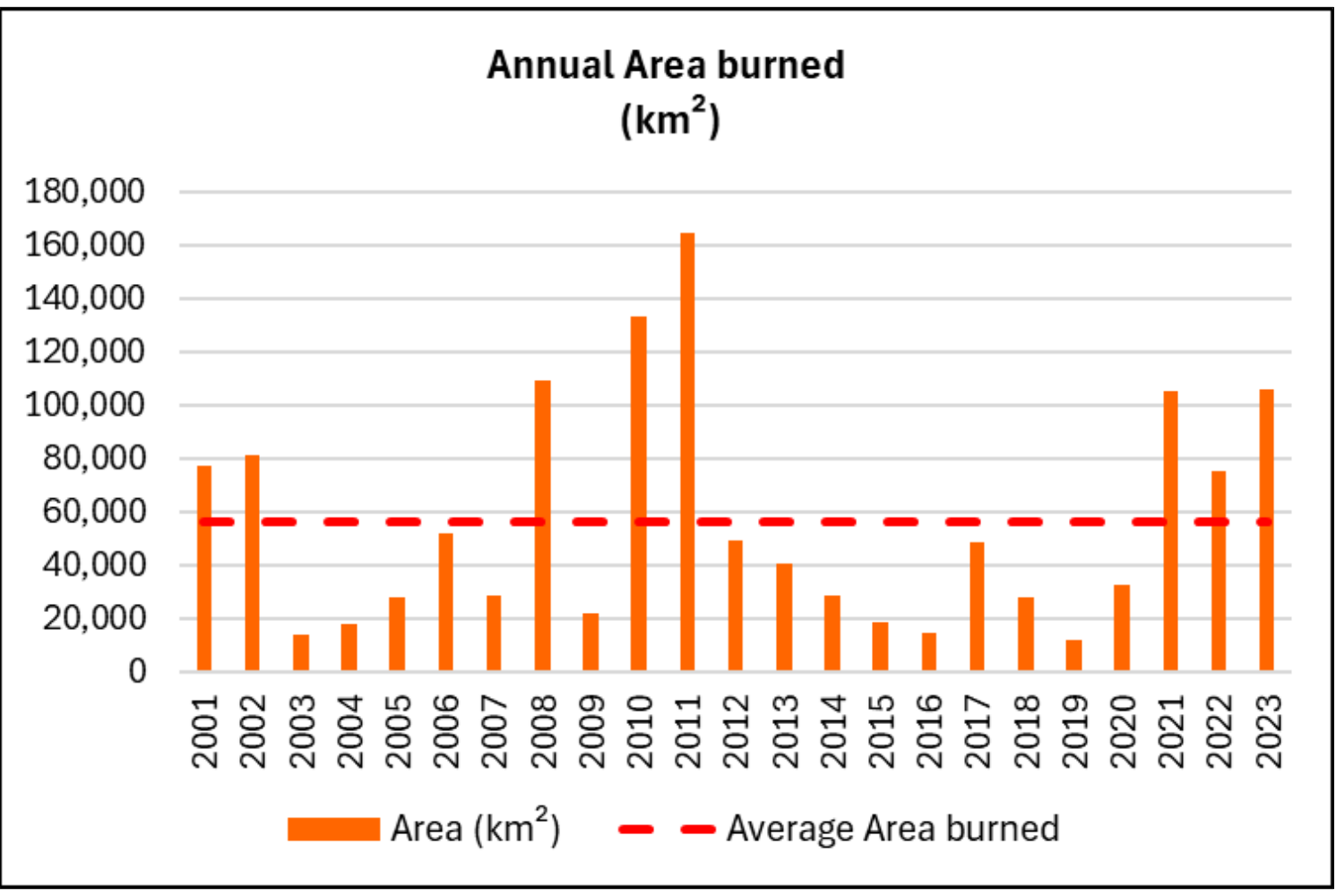
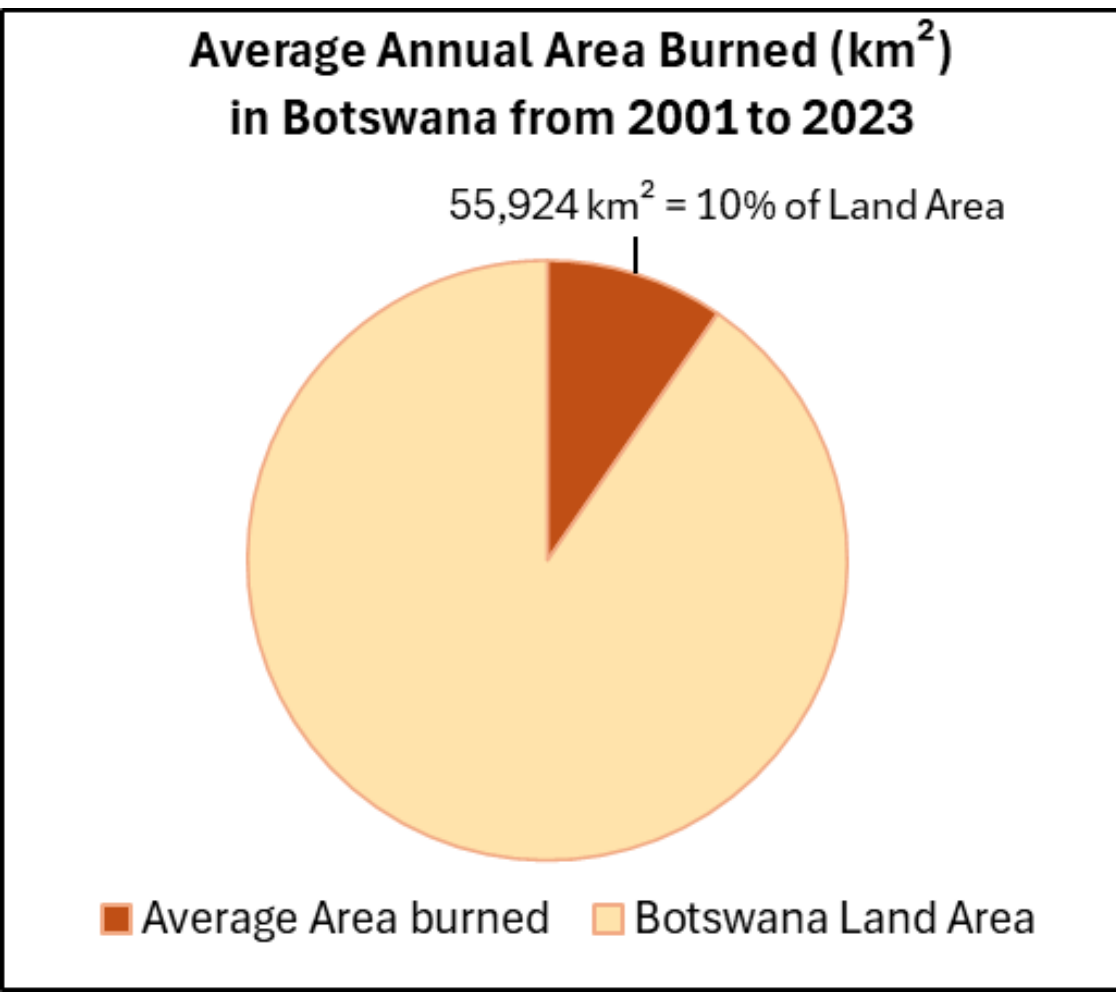




Botswana's Fire Regime

An analysis from 2001 to 2023

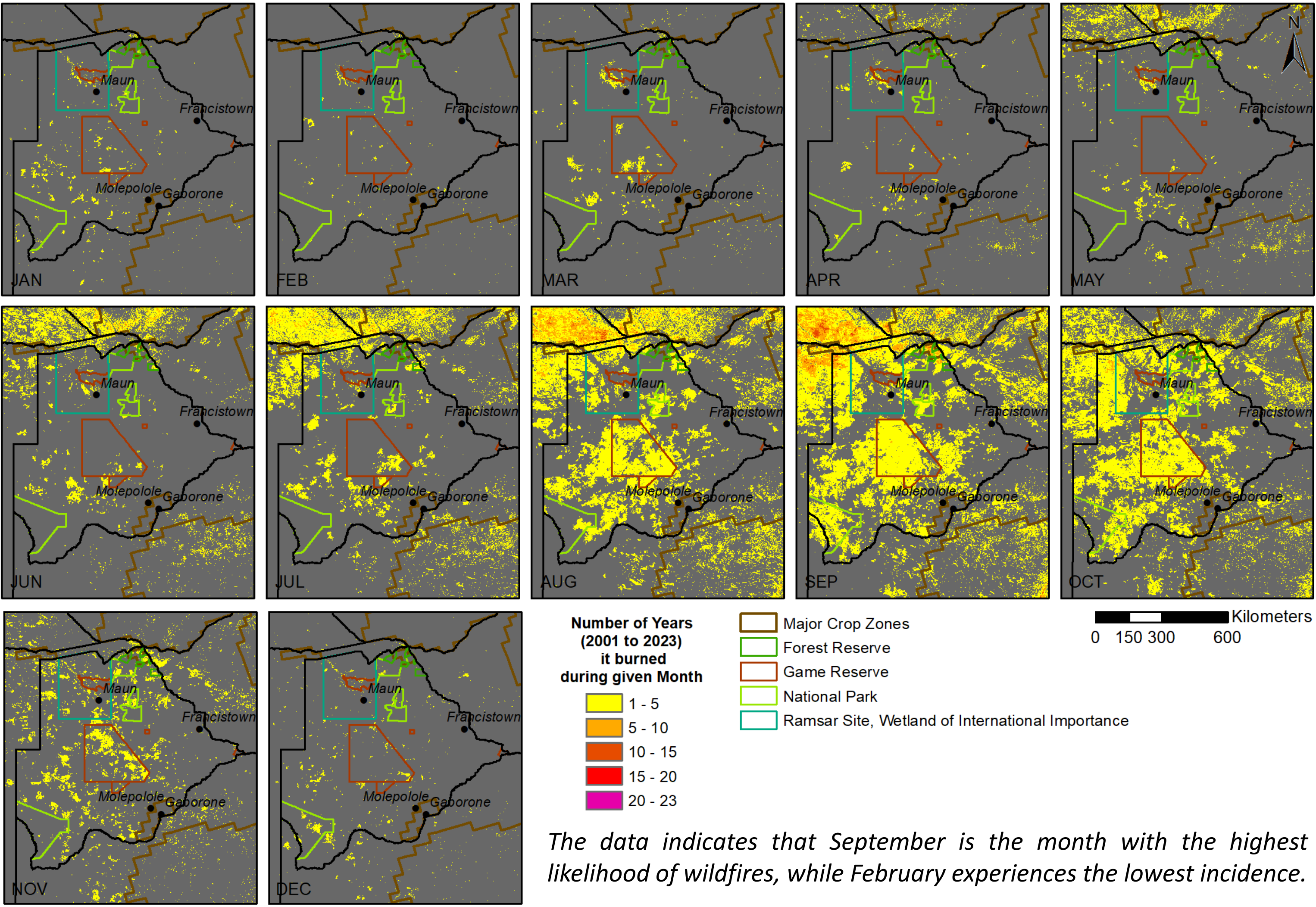
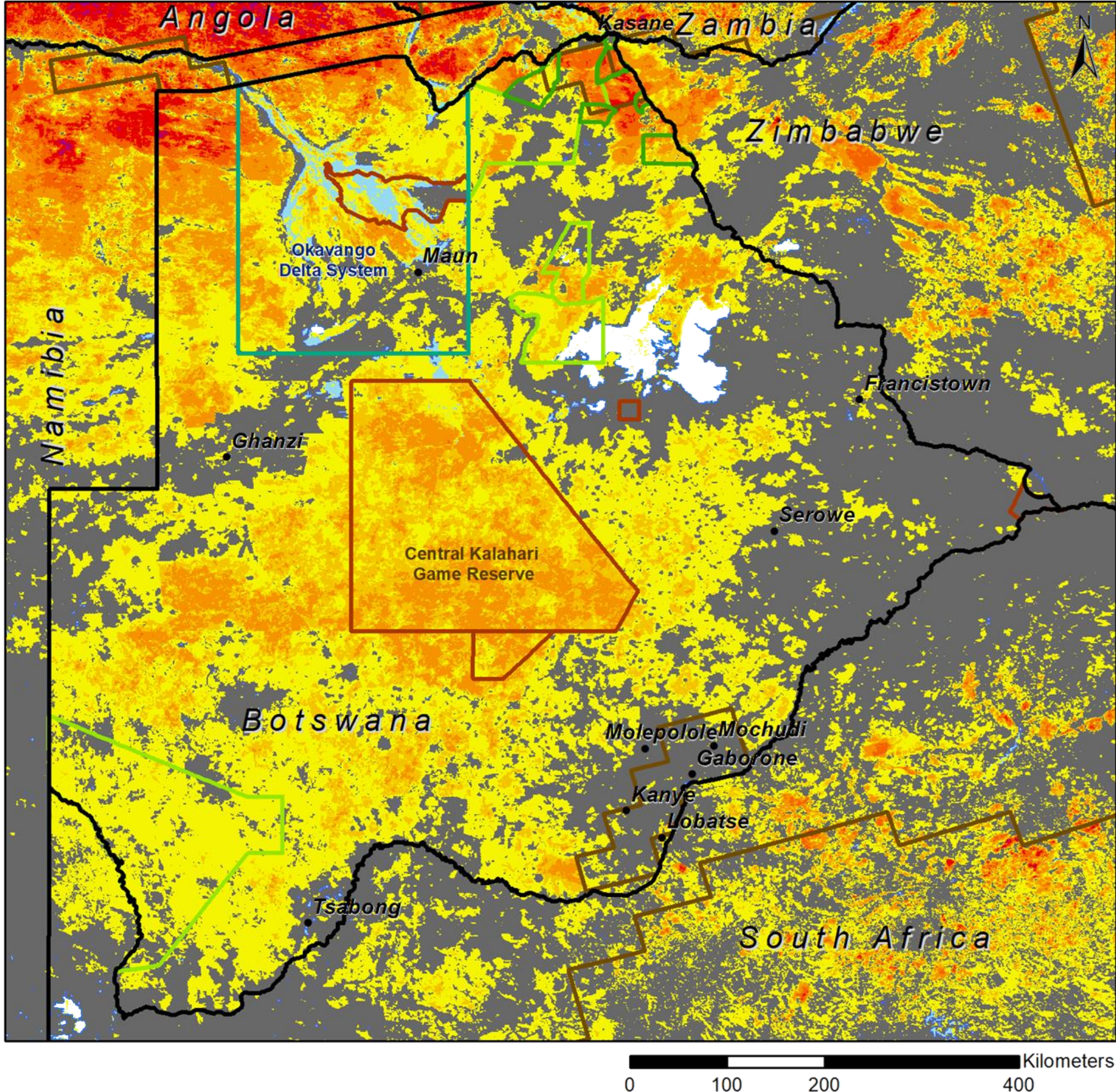
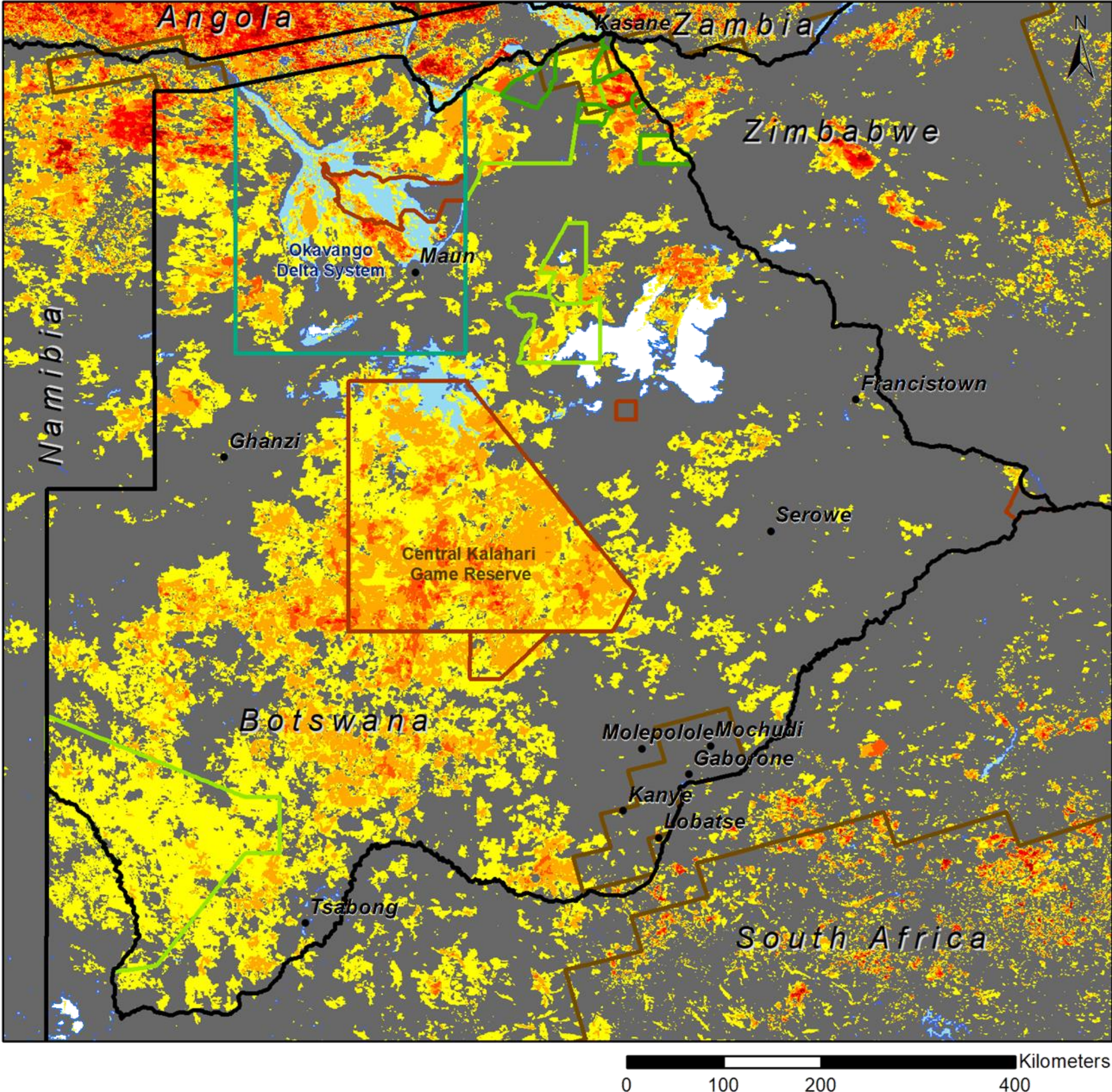
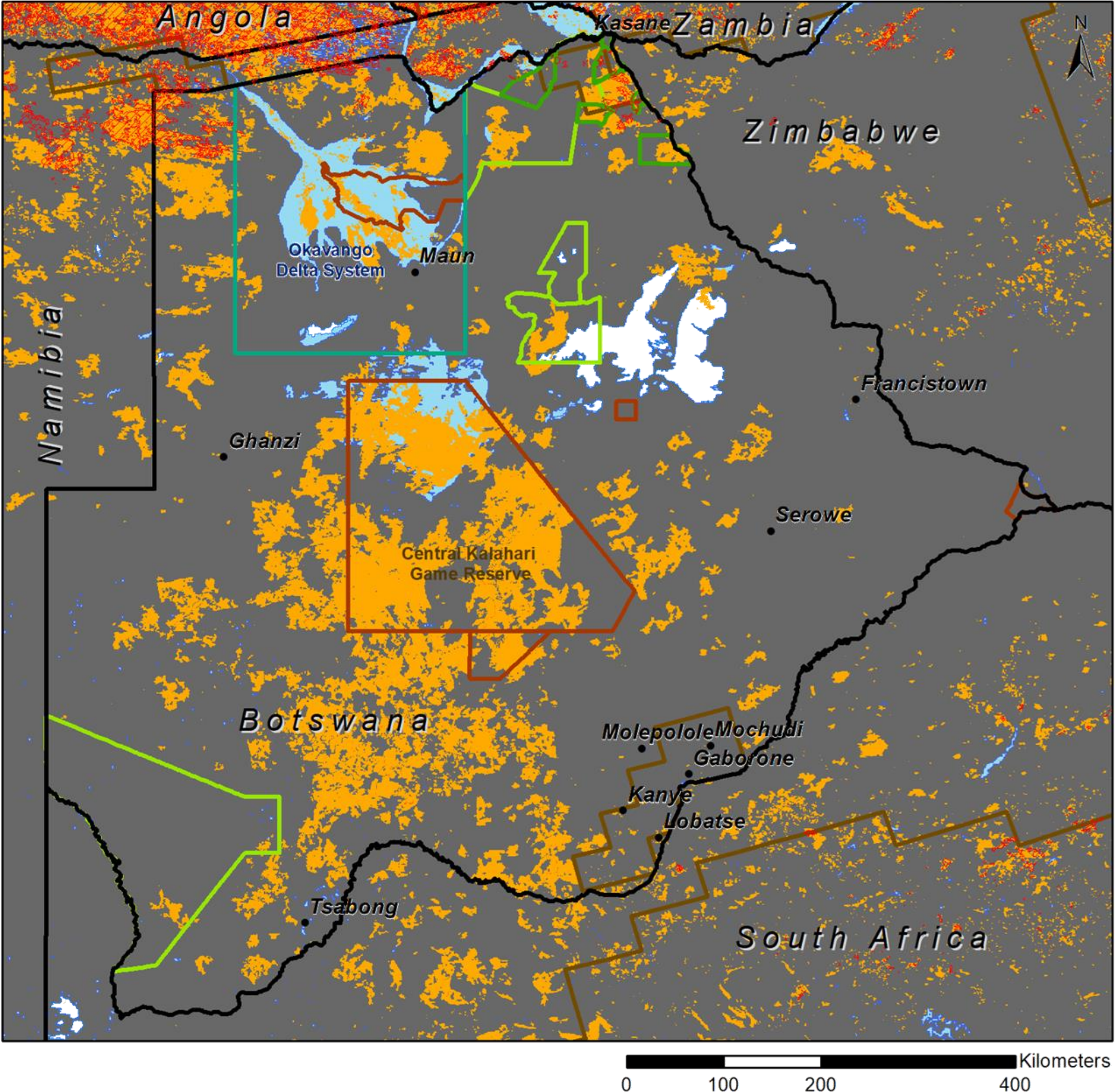


Wildfire Trends and Impacts in Botswana

According to satellite-based MODIS MCD64A1 version 6.1 burnt area fire data from 2001 to 2023, an average of around 10 % of Botswana's surface area, corresponding to around 55 900 km², burns every year due to naturally occurring wildfires or anthropogenic actions. This is considerably less than observed in Botswana's northern neighbors, with Angola, burning an annual average of around 379 000 km², and Zambia, with an average of 230 000 km² every year. The years 2008, 2010 and 2011 were the most catastrophic for Botswana, between 2001 and 2023.

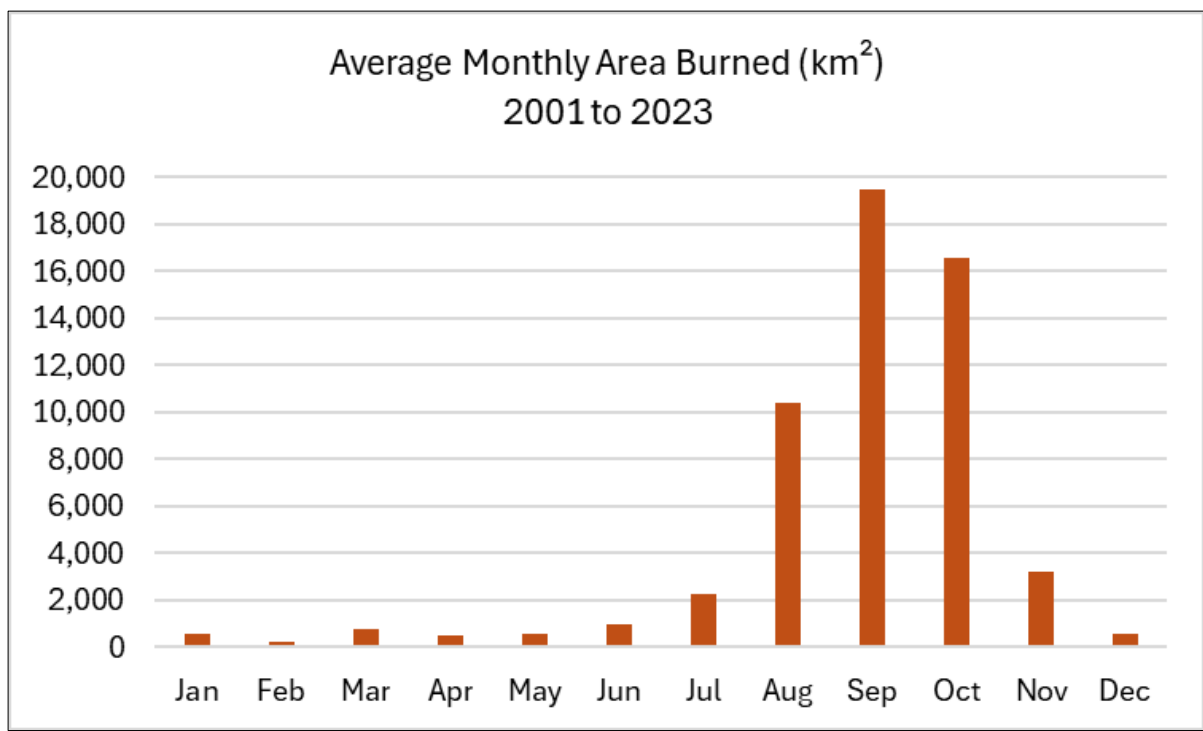
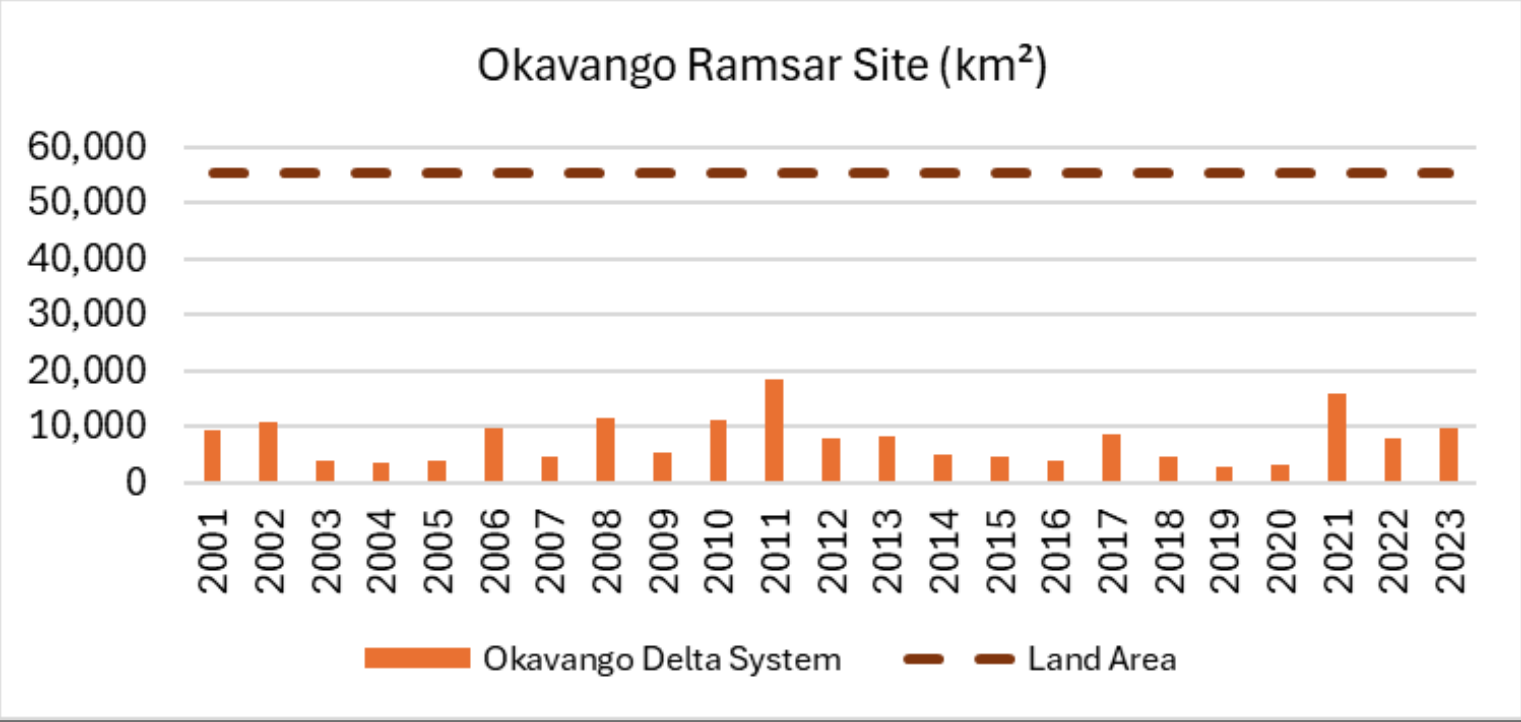
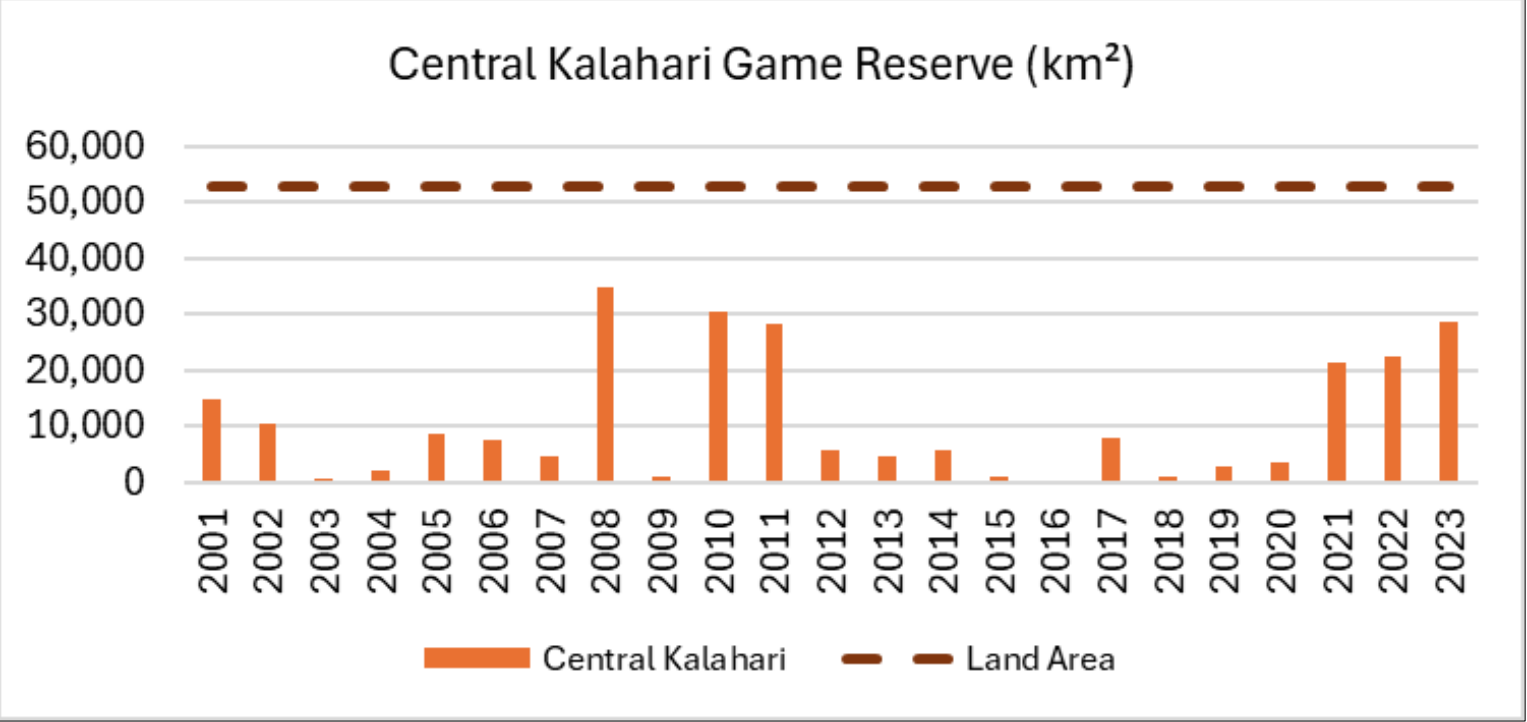
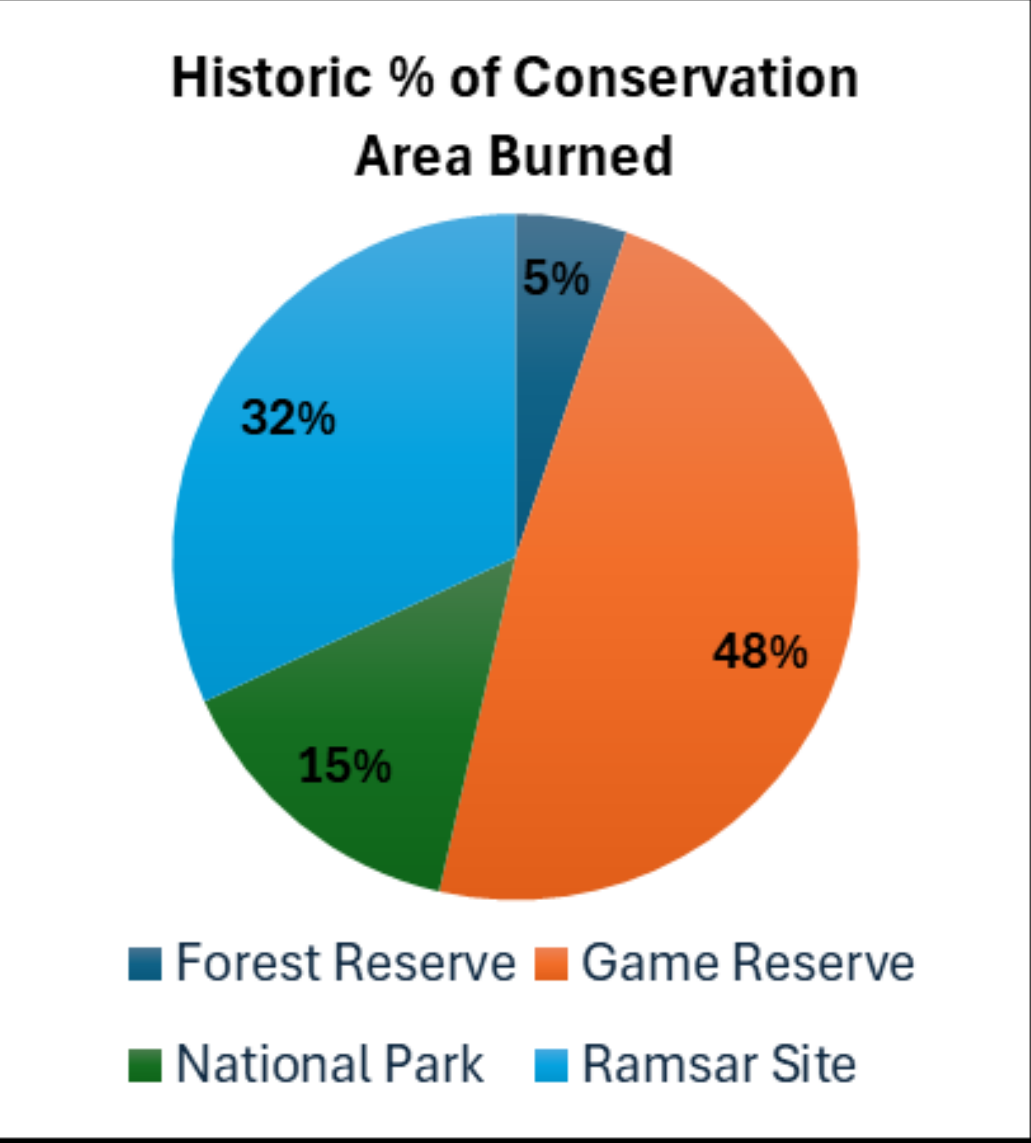
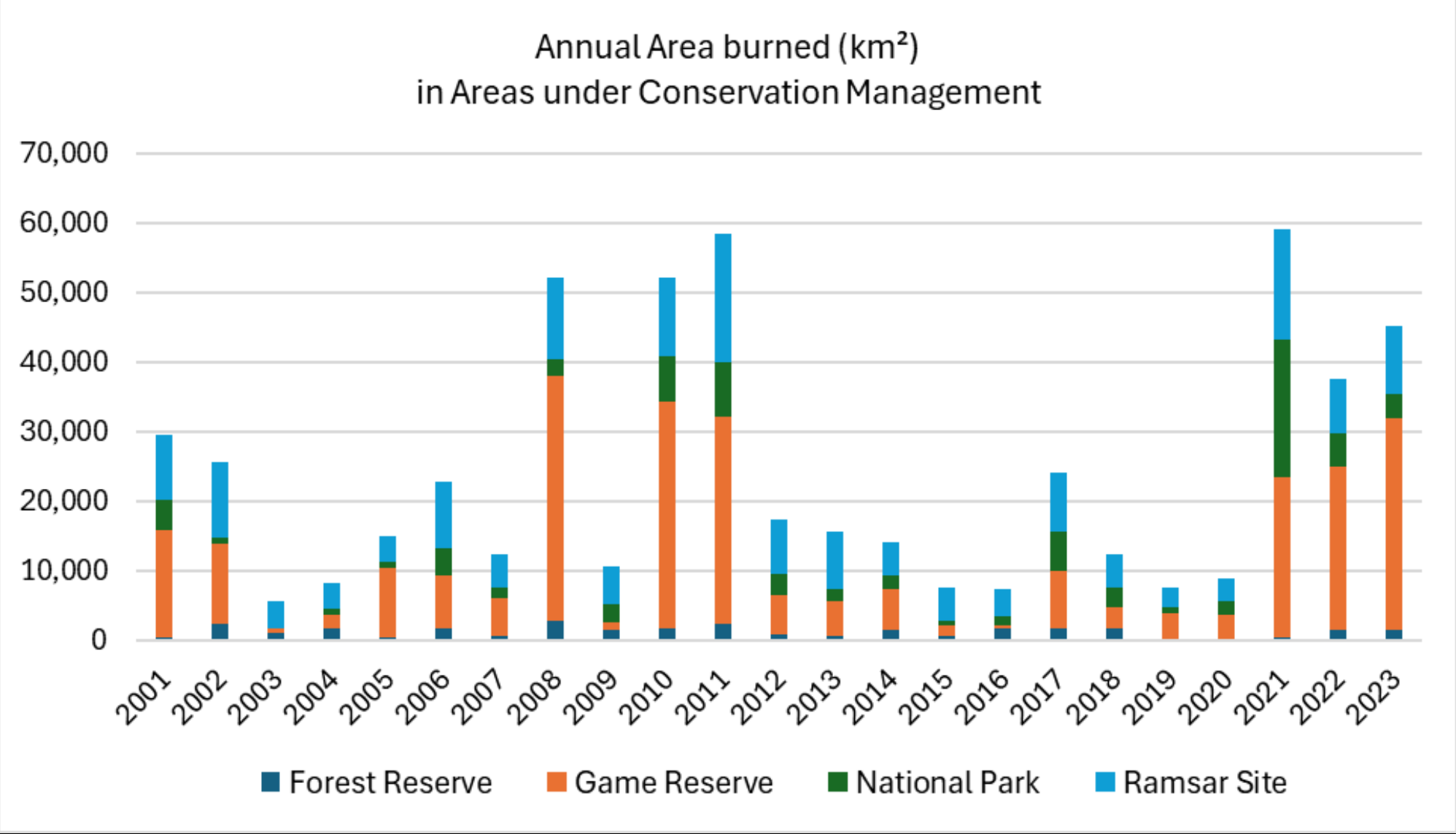
Areas vulnerable to repeat burning

However, areas with a high frequency of burning, with one area on the north-western border of Botswana having burned 23 consecutive years, do cause concern for Botswana's biodiversity hotspots and unique wildlife and flora species. Areas particularly affected by high frequencies of burning are the north-eastern part including the Chobe National Park, the Kasane Forest Reserve, the Kazuma Forest Reserve, the northern part of the Okavango Ramsar site and the north-western part of Botswana.



Burning in Areas under Conservation Management

Game Reserves are the areas under conservation management that burn the most in Botswana, with the Central Kalahari Game Reserve burning the most with an average of around 10,748 km² every year, followed by the Okavango Ramsar Site with on average 7 620 km² every year.



Annual fire season

The main months of the fire season in Botswana are from July to November, generally peaking in September. On average, around 19 469 km² burn in Botswana in the month of September. The biggest areas burned in a month were in September 2008, with 51 300 km², mainly in the central parts of Botswana (Ghanzi, Central Kgalagadi) and October 2011, with 80 400 km², mainly in Ngamiland, Ghanzi and Kgatleng.

