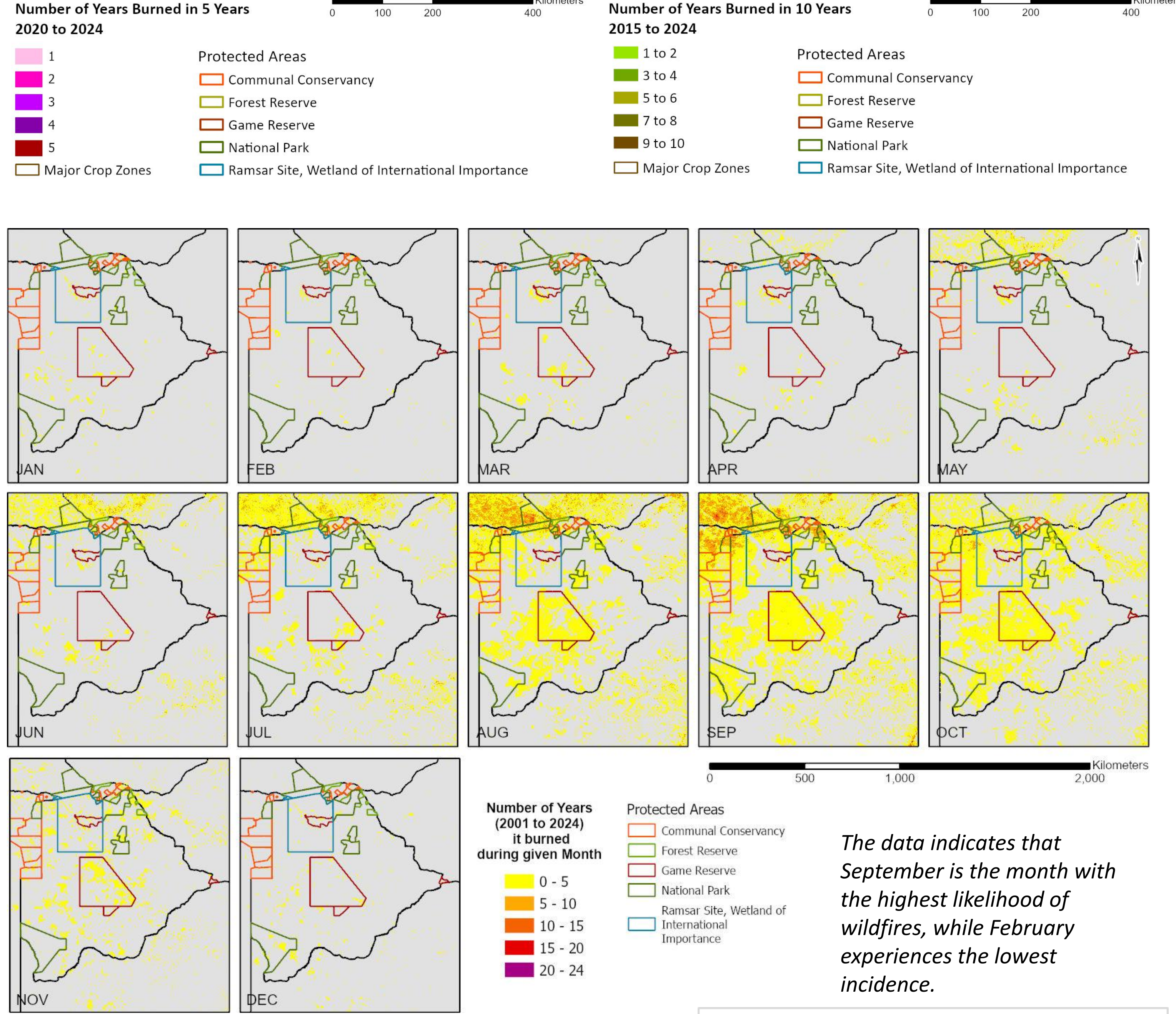
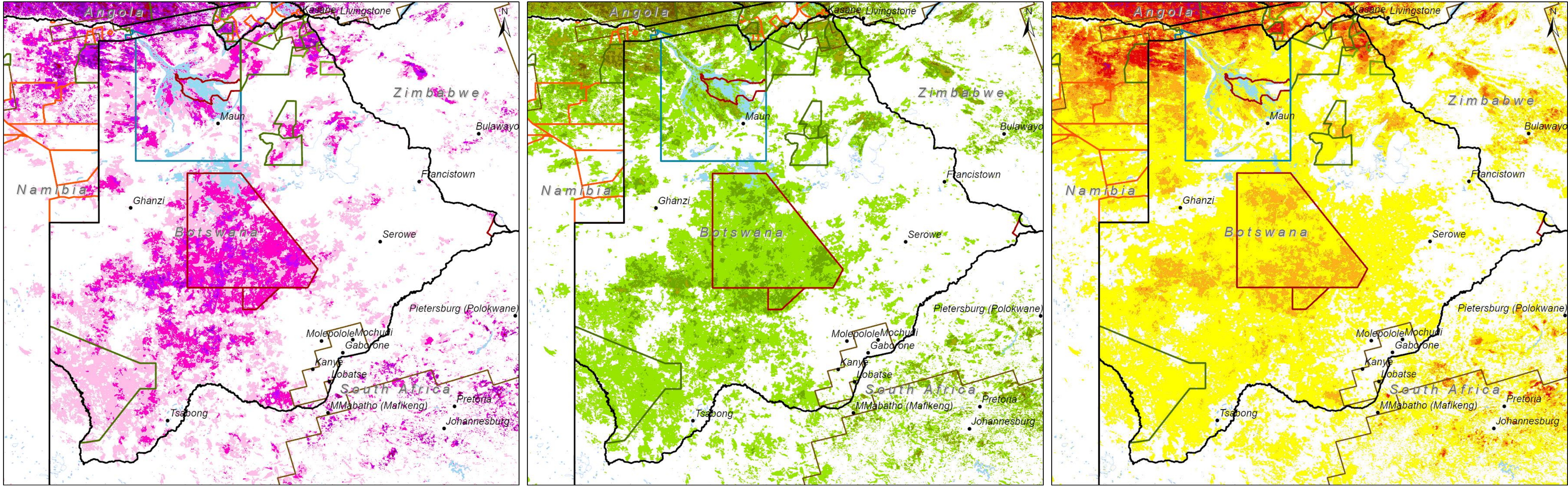
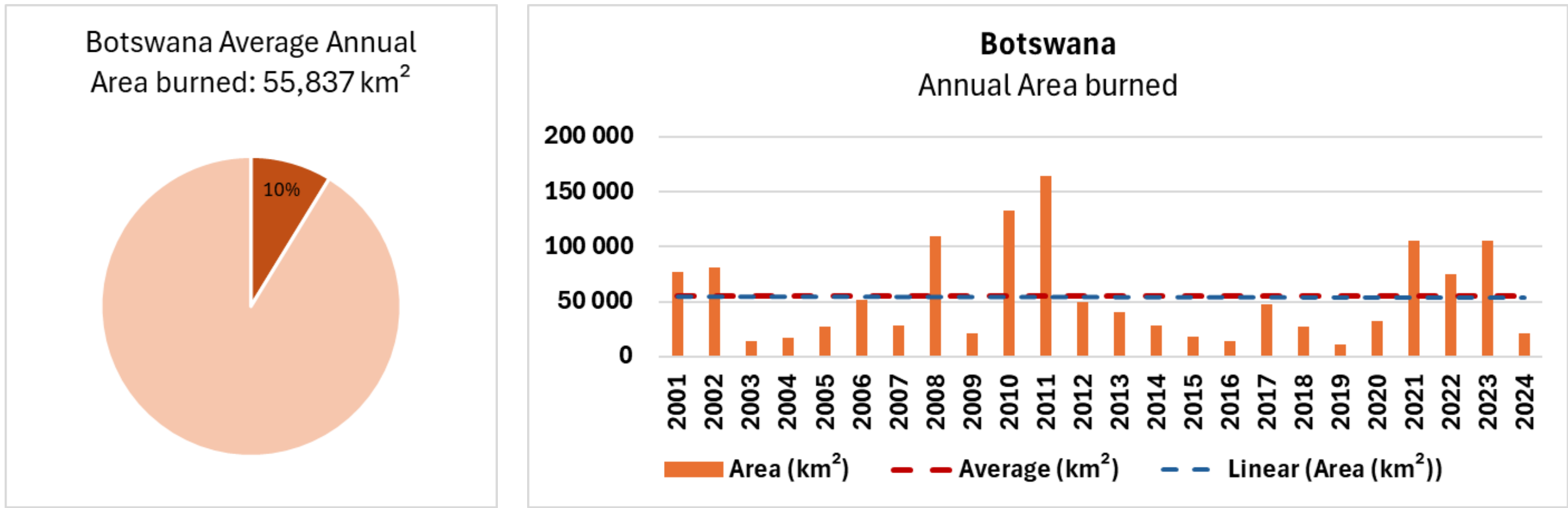


Botswana's Fire Regime

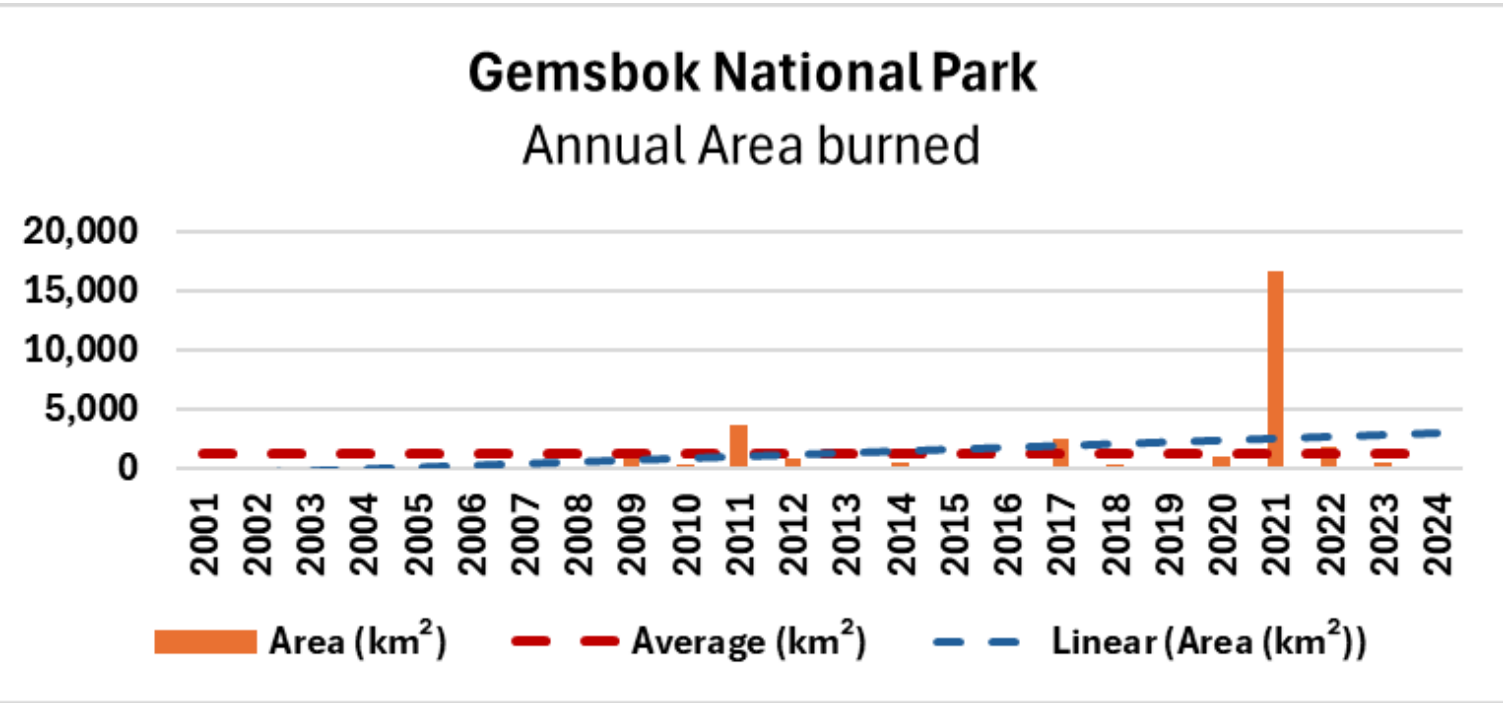
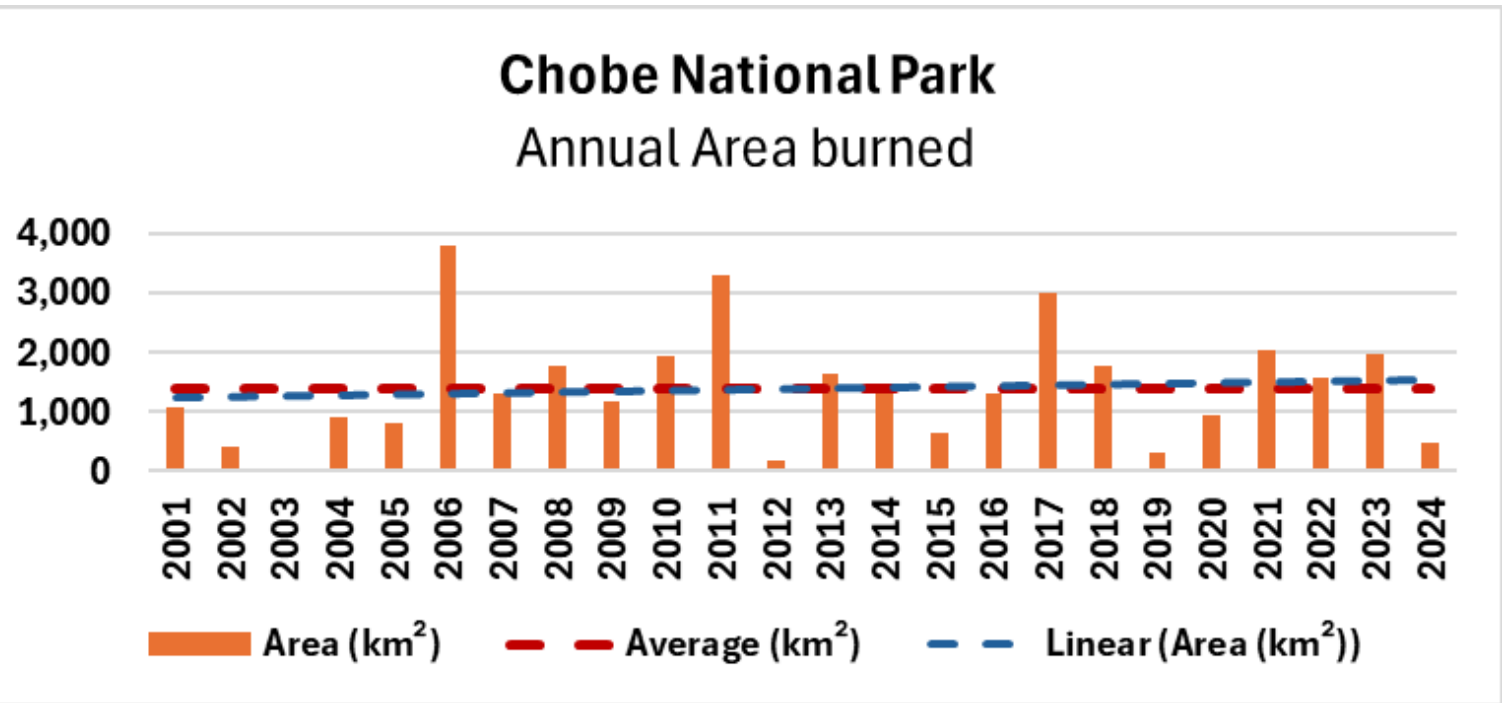
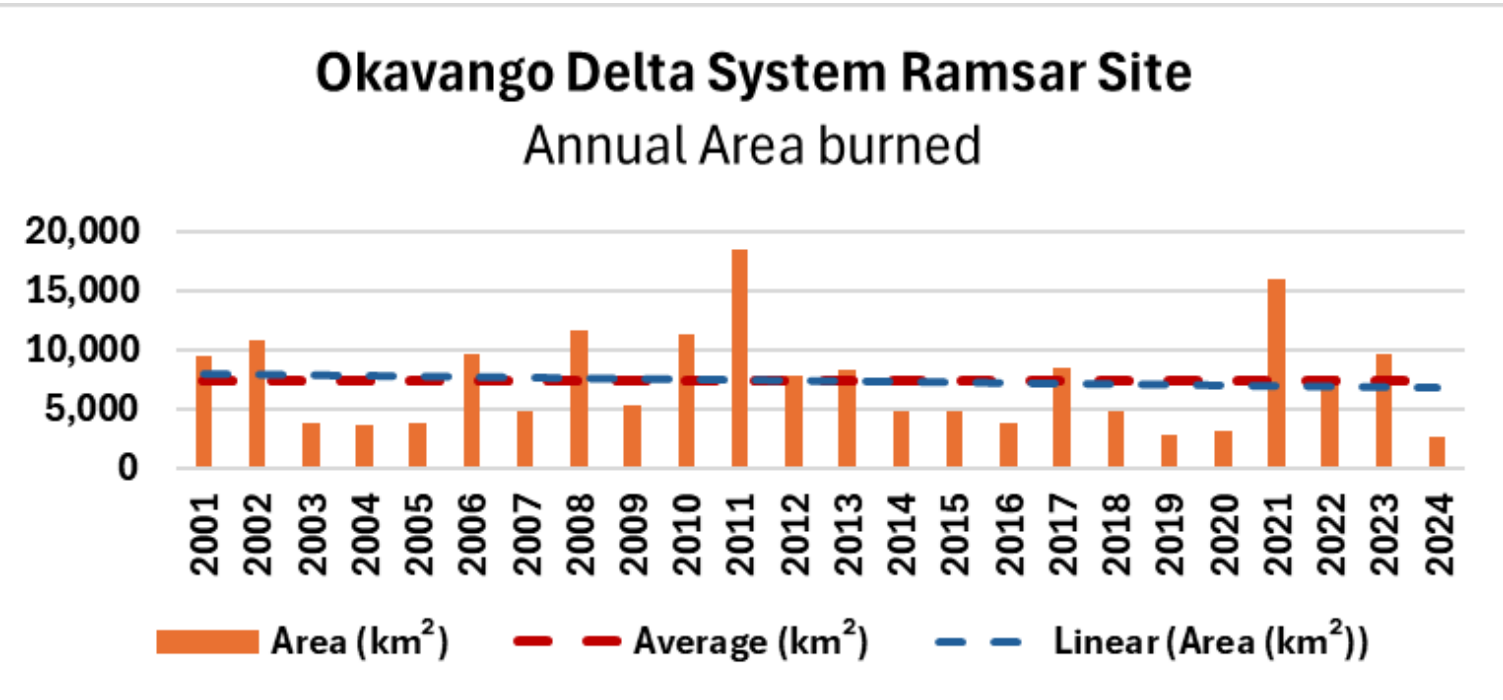
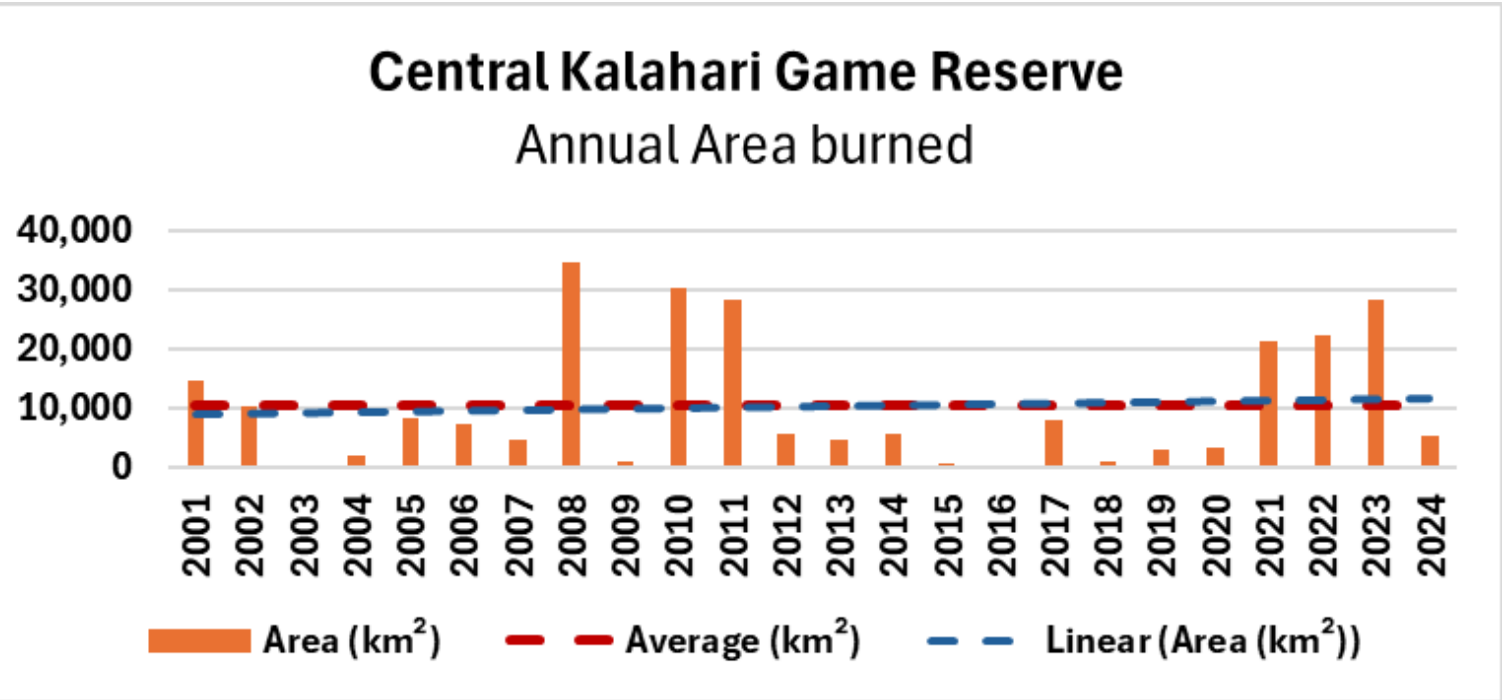
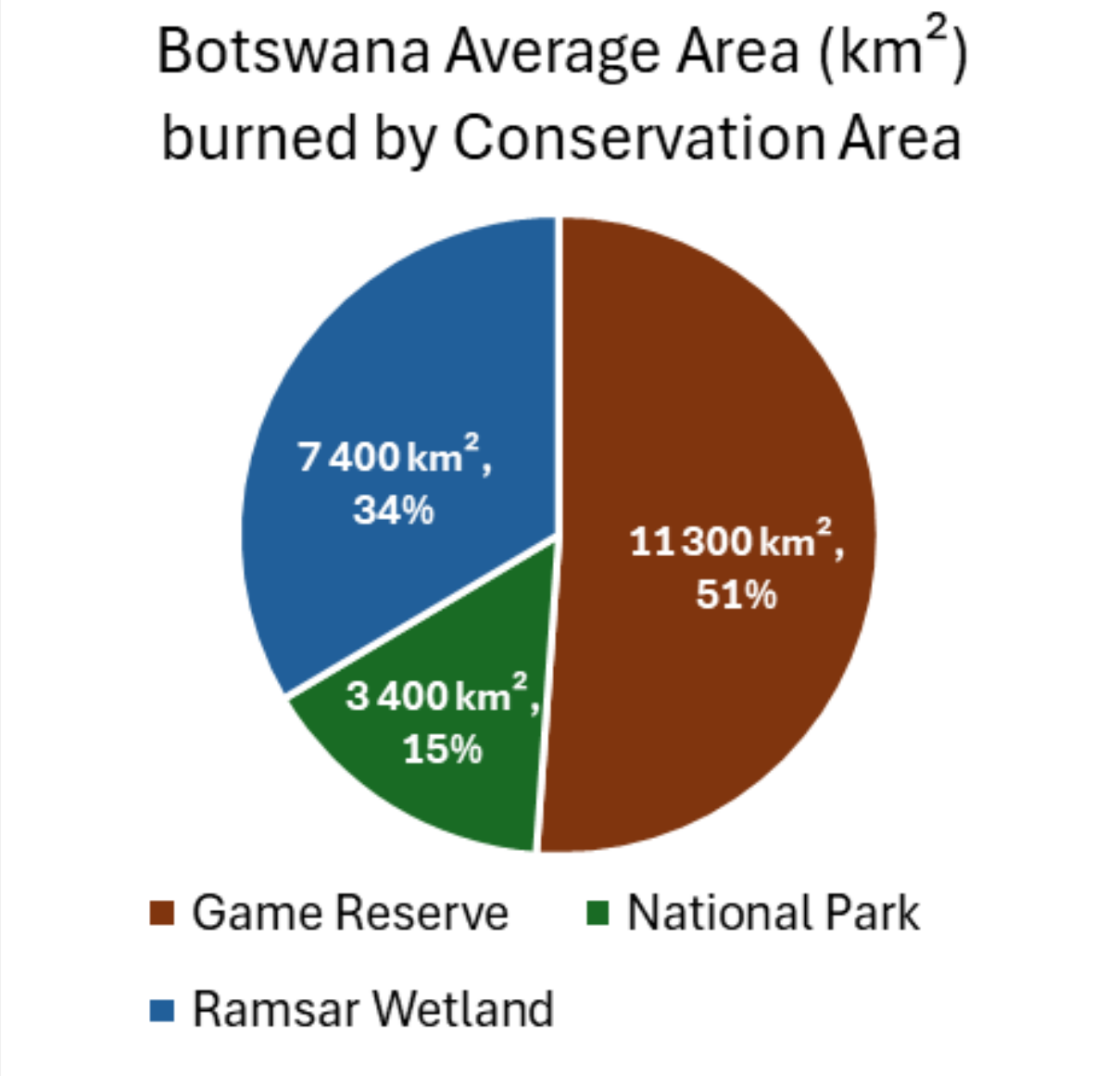
An analysis from 2001 to 2024



On average, just under 19 000 km² burn in Botswana during 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.

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 annual area of around 10 500 km², followed by the Okavango Ramsar Site with annual average of around 7 400 km². Chobe and Gemsbok National Park burn 1 400 and 1 300 km² on average every year.



Wildfire Trends in Botswana

According to satellite-based MODIS MCD64A1 version 6.1 burnt area fire data from 2001 to 2024 , an average of around 10 % of Botswana's surface area, corresponding to just under 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 just under 364 000 km², and Zambia, with an average of almost 228 000 km² every year. Between 2001 and 2024, the years 2008, 2010 and 2011 were the most catastrophic for Botswana with about 110 000, 133 000 and 165 000 km² burning respectively. It does appear that years with above average annual burns do follow above average annual rainfall periods.

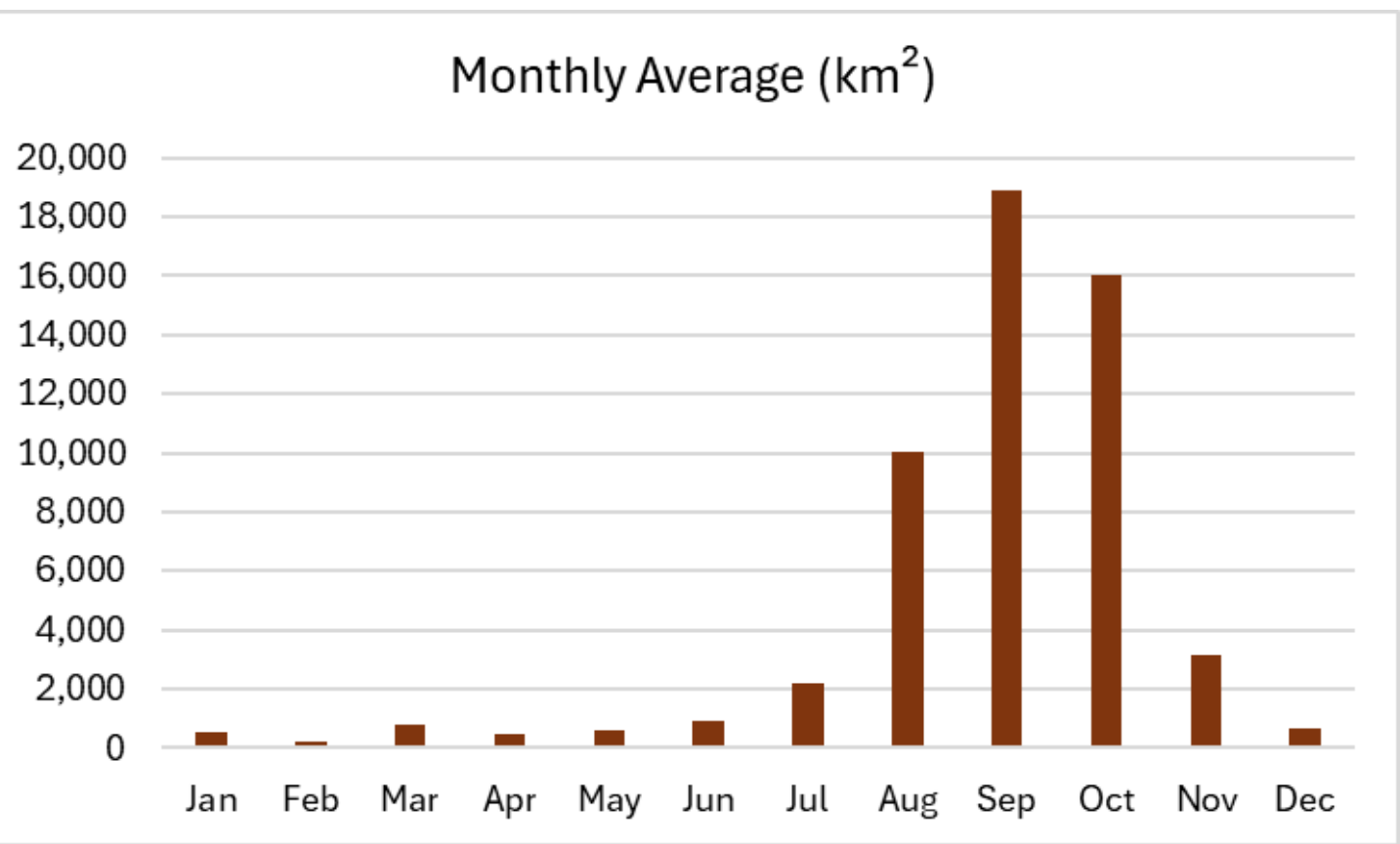
After a prolonged drought, that started during the 2022/23 rainfall year, and coupled with above average burning in 2023, the vegetation condition was poor, and accordingly, fuel loads were low and consequently, the extent of burning in Botswana was also low in 2024.

However, in the first quarter of 2025, much of Botswana received above average rainfall, resulting in abundant grazing and consequently heavy fuel loads. This does foretell a risk of higher fire risk in fire-prone areas during the coming dry winter months and leading up to the 2025/26 rainfall season.

Areas vulnerable to repeat burning

Areas with a high frequency of burning, with one area on the north-western border of Botswana having burned 24 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.

Botswana fire season occurs from July to November



Annual fire season

The main months of the fire season in Botswana are from July to November, generally peaking in the drier winter months, and highest in September.

