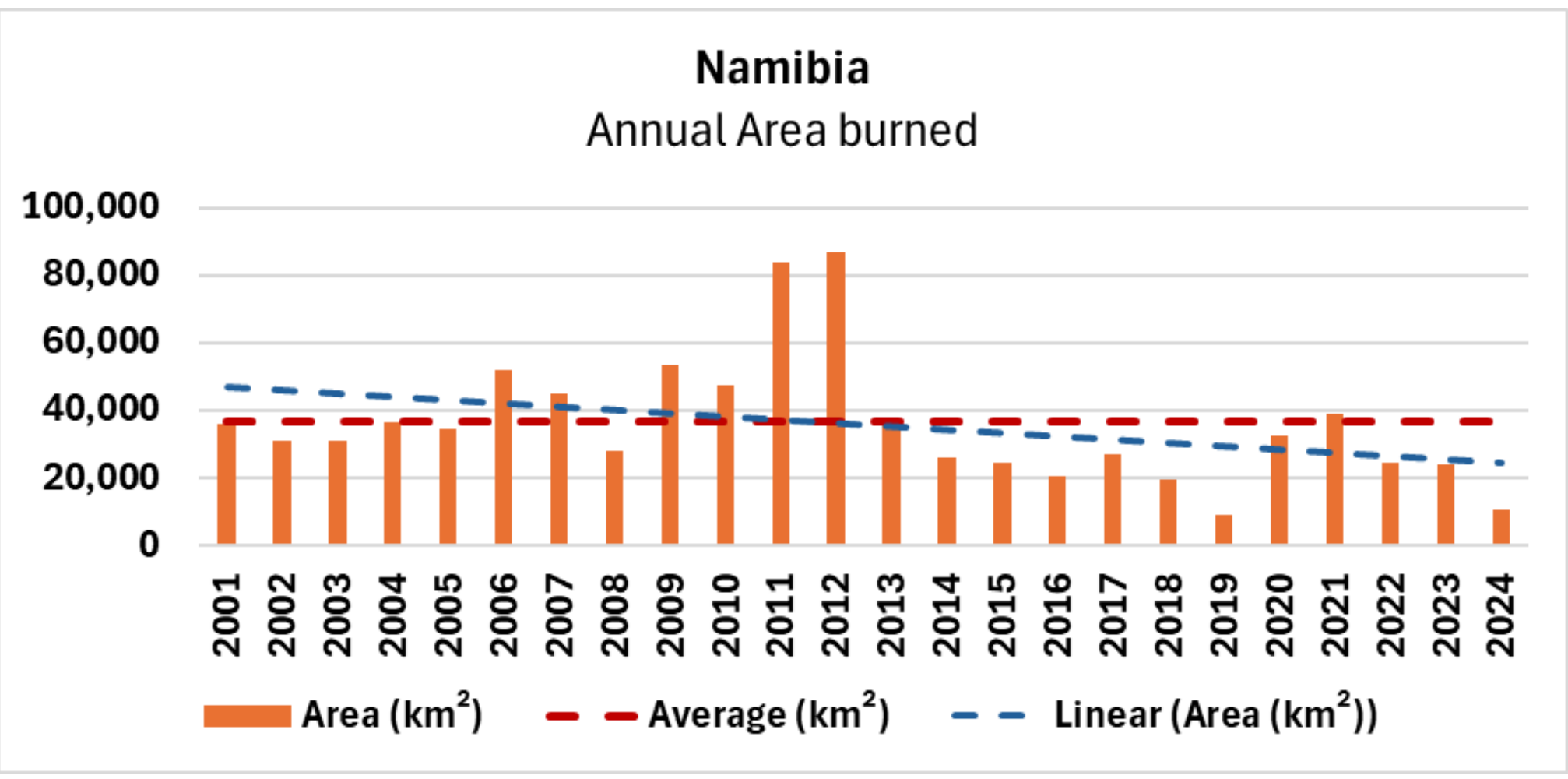
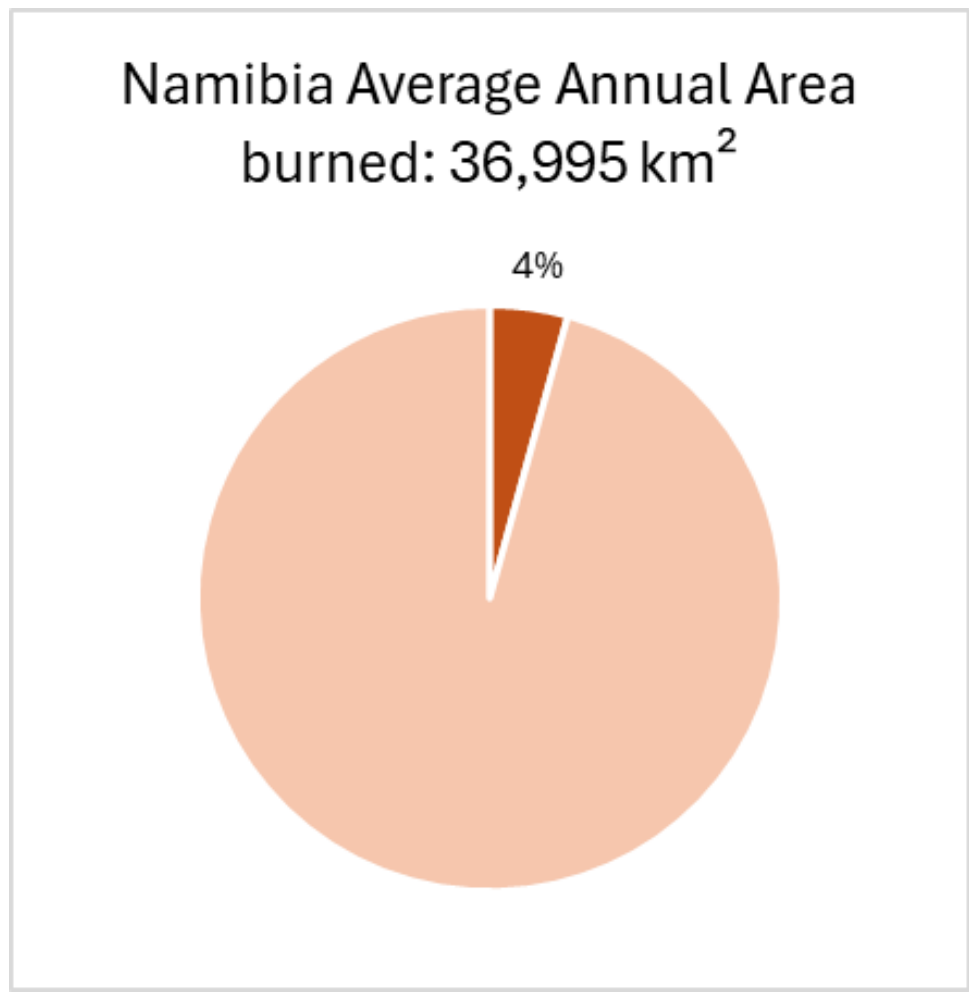


Namibia's Fire Regime

An analysis from 2001 to 2024



Wildfire Trends and Impacts in Namibia

According to satellite-based MODIS MCD64A1 version 6.1 burnt area fire data from 2001 to 2024 , an average of around 4 % of Namibia's surface area, corresponding to around 37 000 km², burns every year due to naturally occurring wildfires or anthropogenic actions. This is considerably less than observed in Namibia's northern neighbors, with Angola, burning an annual average of around 364 000 km², and Zambia, with an average of almost 228 000 km² every year. Notably, the majority of Namibia's land surface is arid or semi-arid and therefore, the landscape provides much smaller fuel loads than in its northern neighbors.

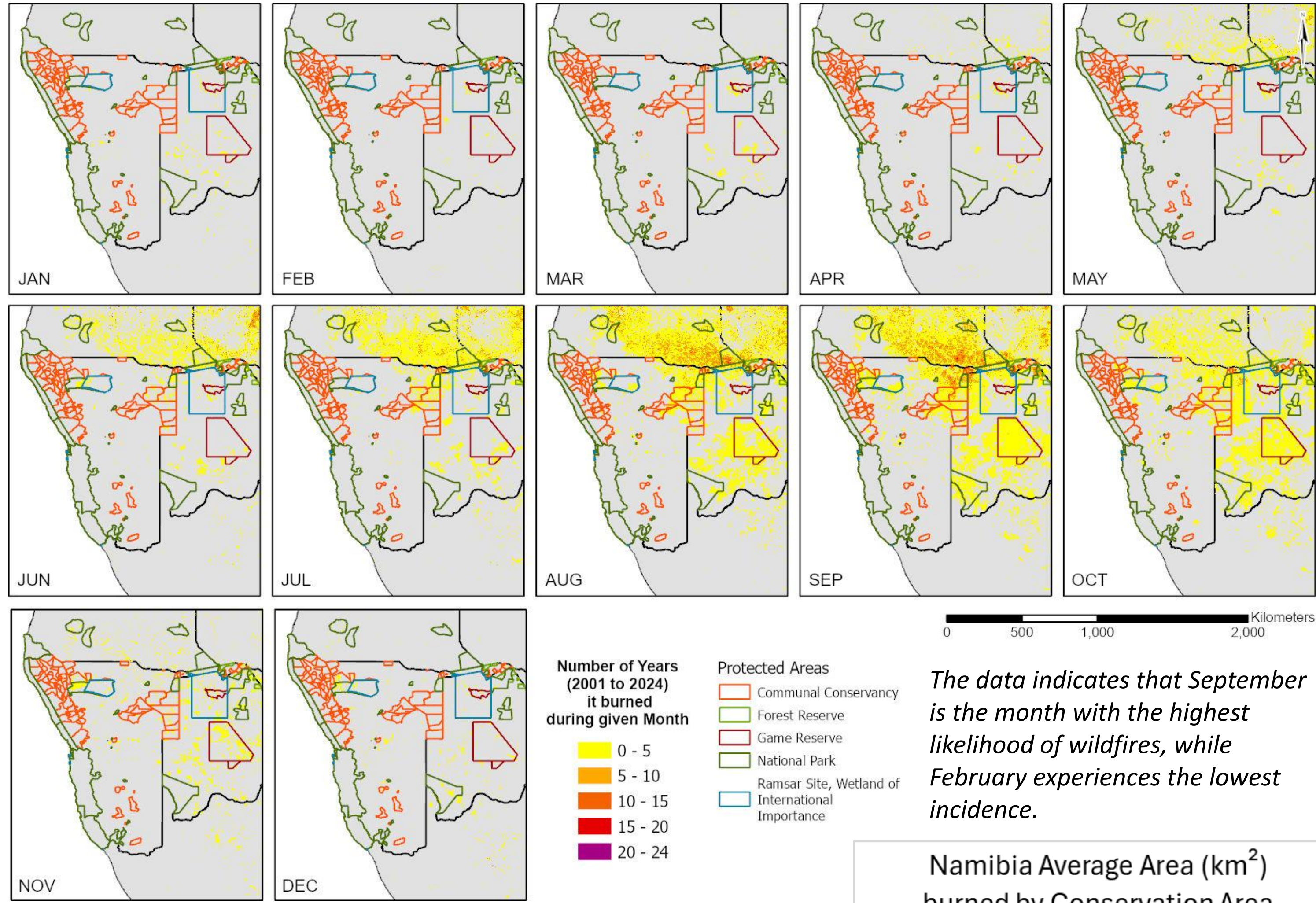
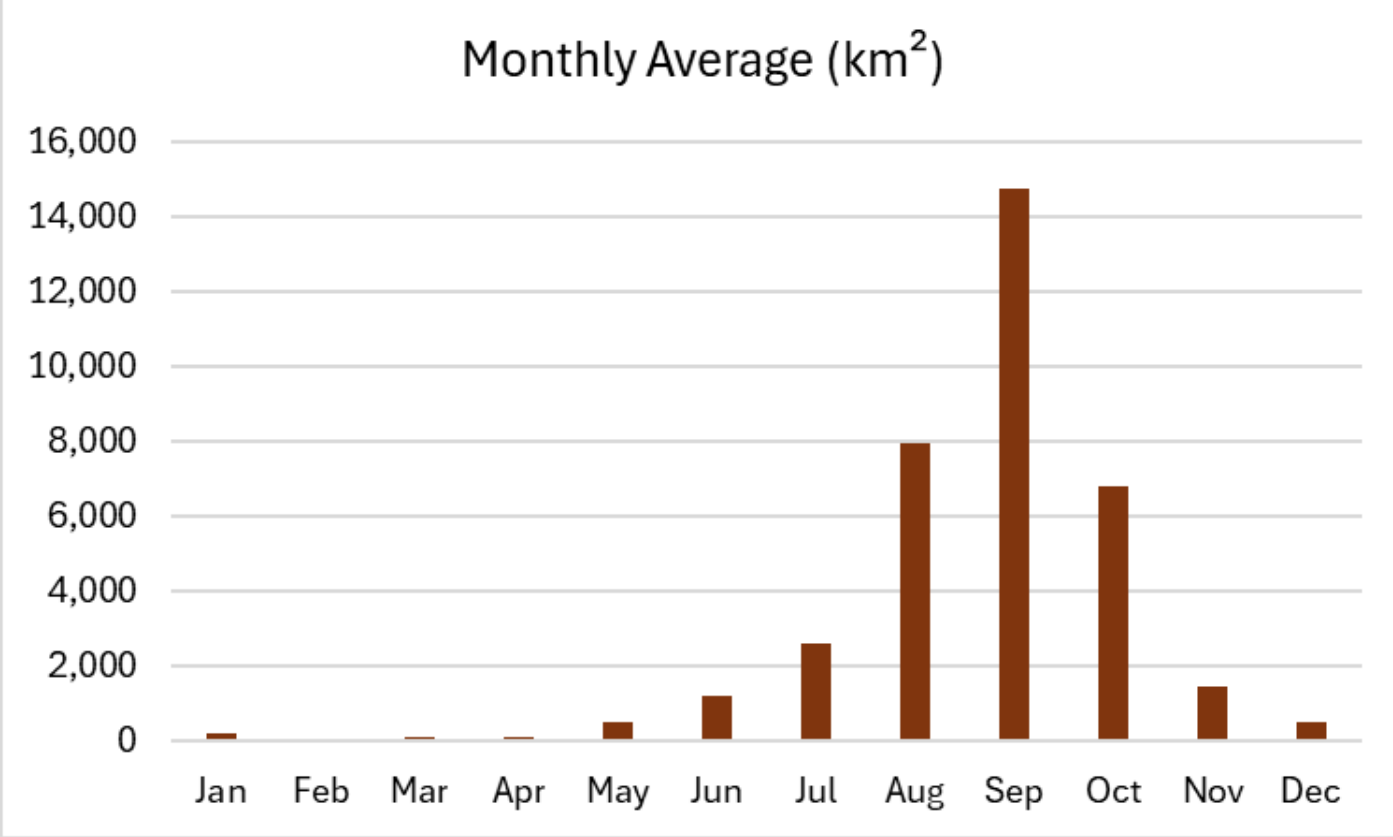
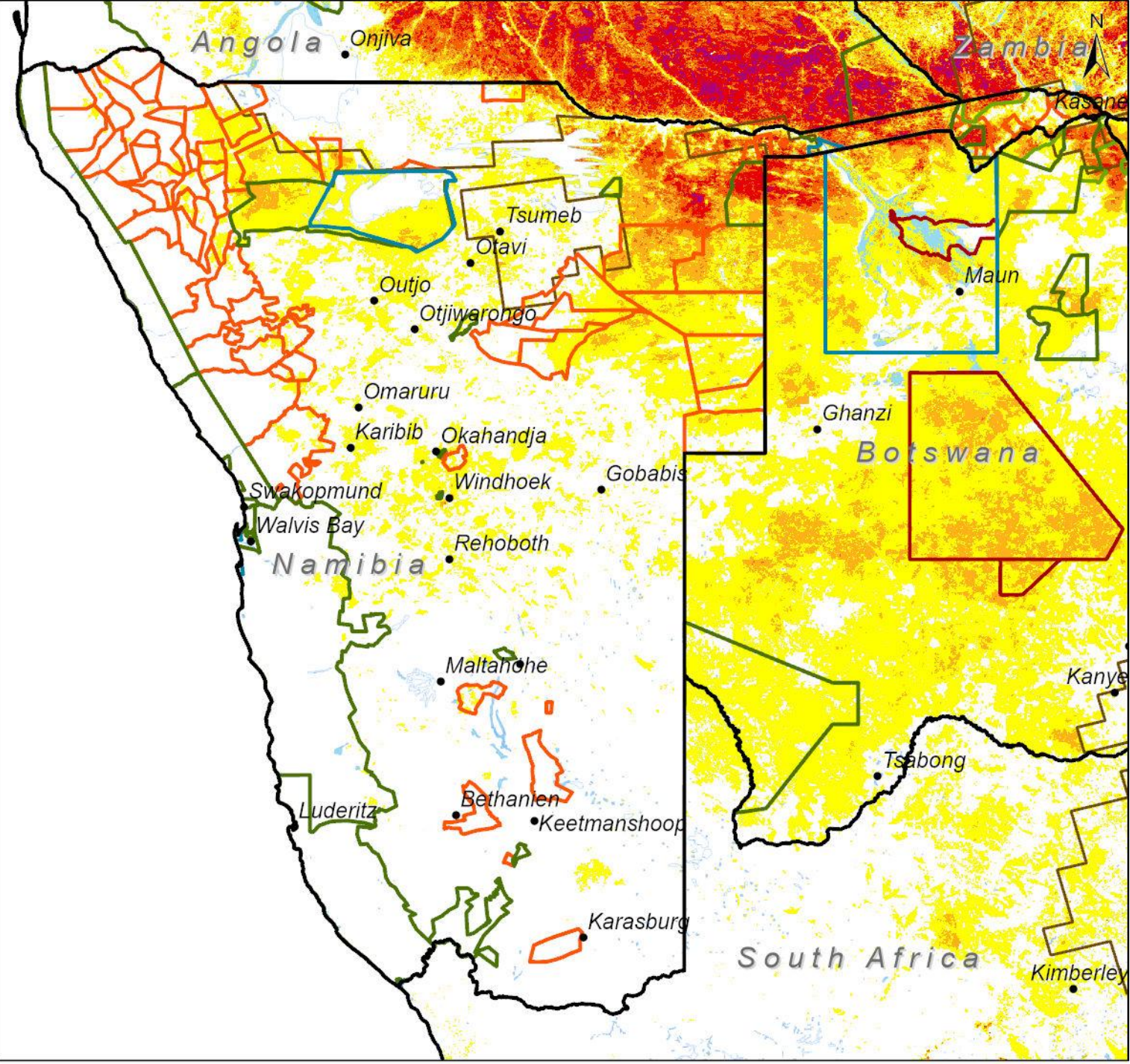
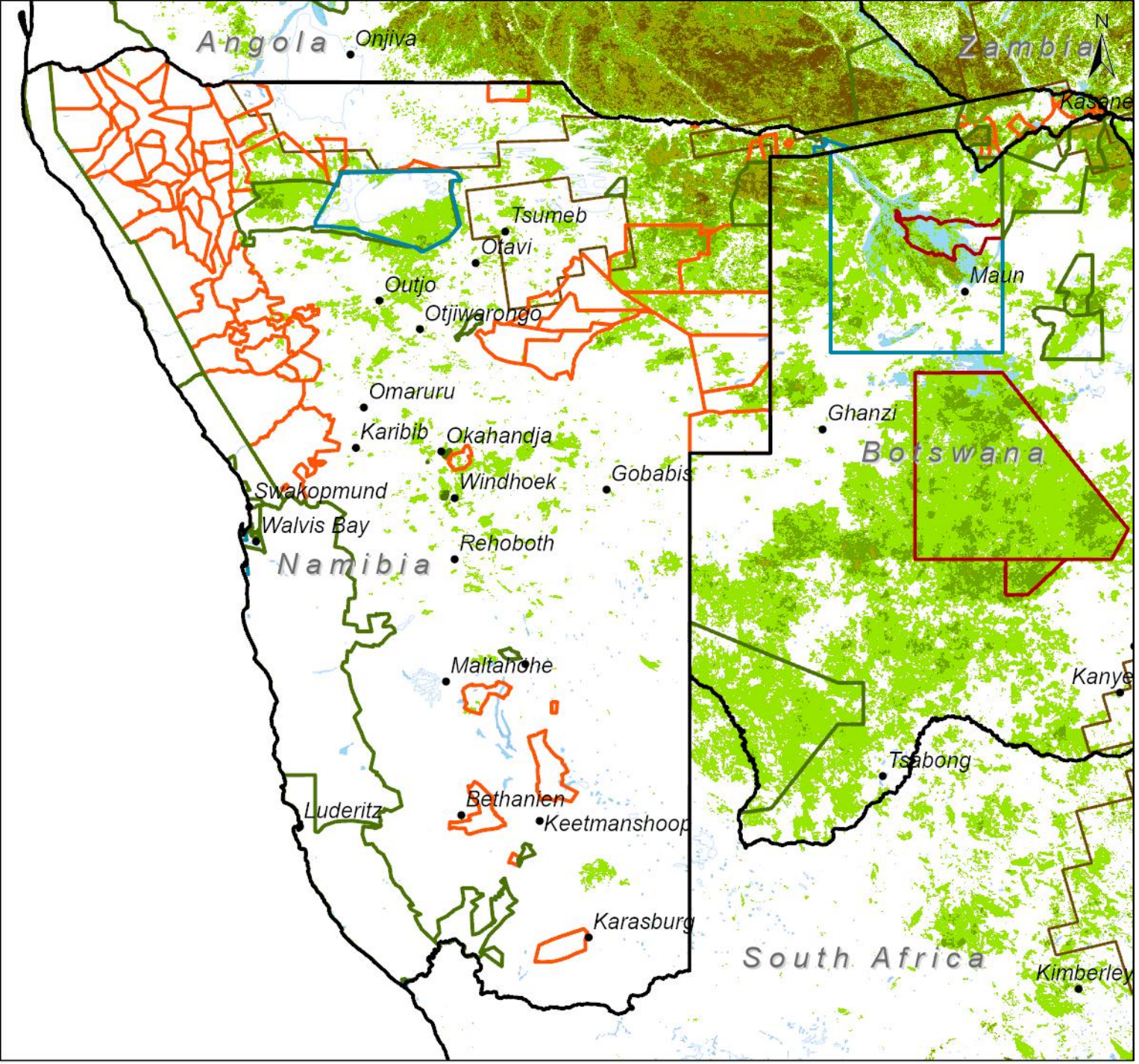
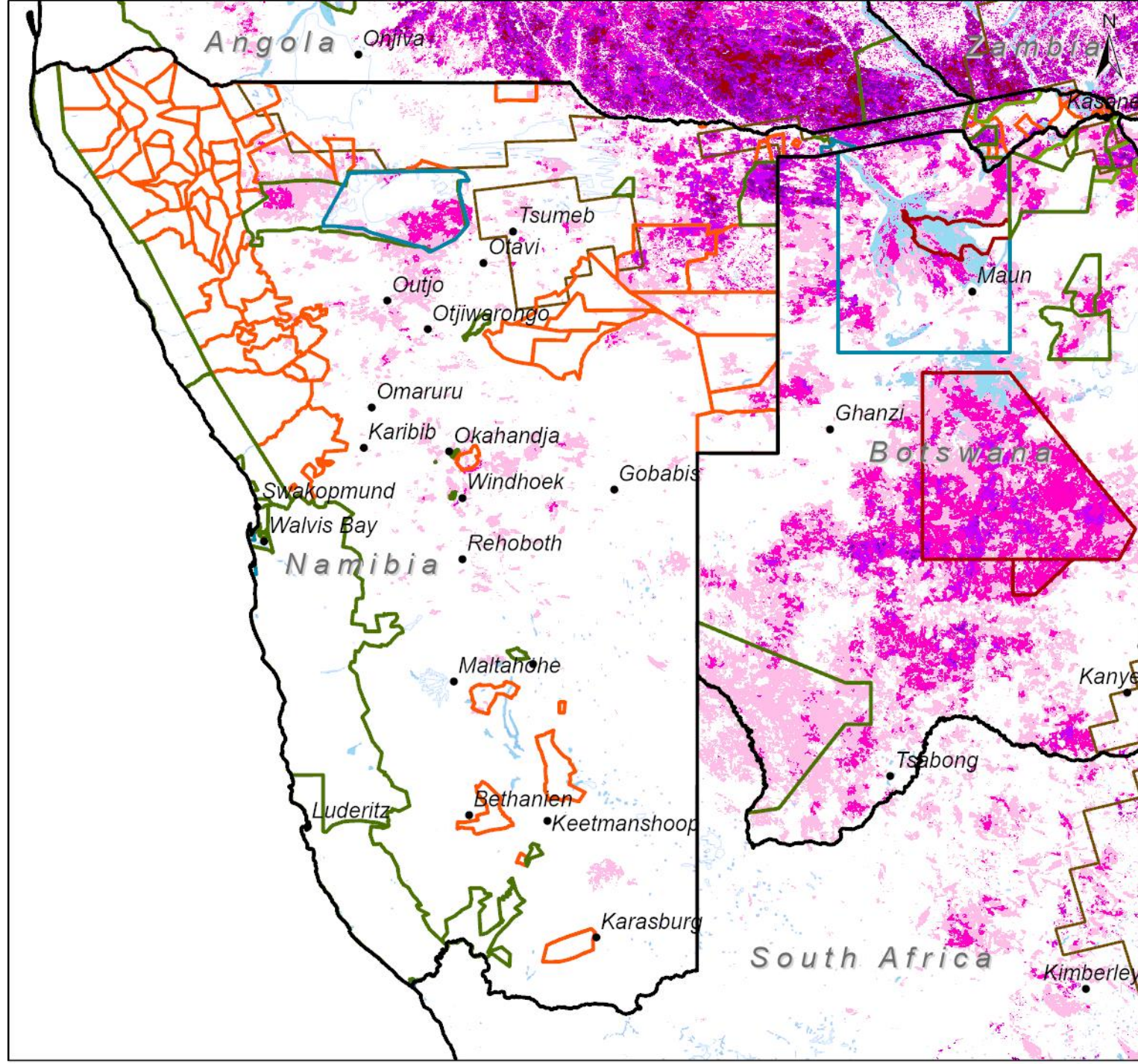
In Namibia's past 24 years fire history, the years 2011 and 2012 were the most catastrophic, with around 84 000 and 87 000 km² burning respectively.

Areas vulnerable to repeat burning

In particular Namibia's East Kavango and Zambezi are subjected to high frequencies of burning, with some areas having burned almost every year in the past 24 years. Areas subjected to a high frequency of burning do cause concern for Namibia's biodiversity and unique Okavango and Zambezi wildlife and flora species.

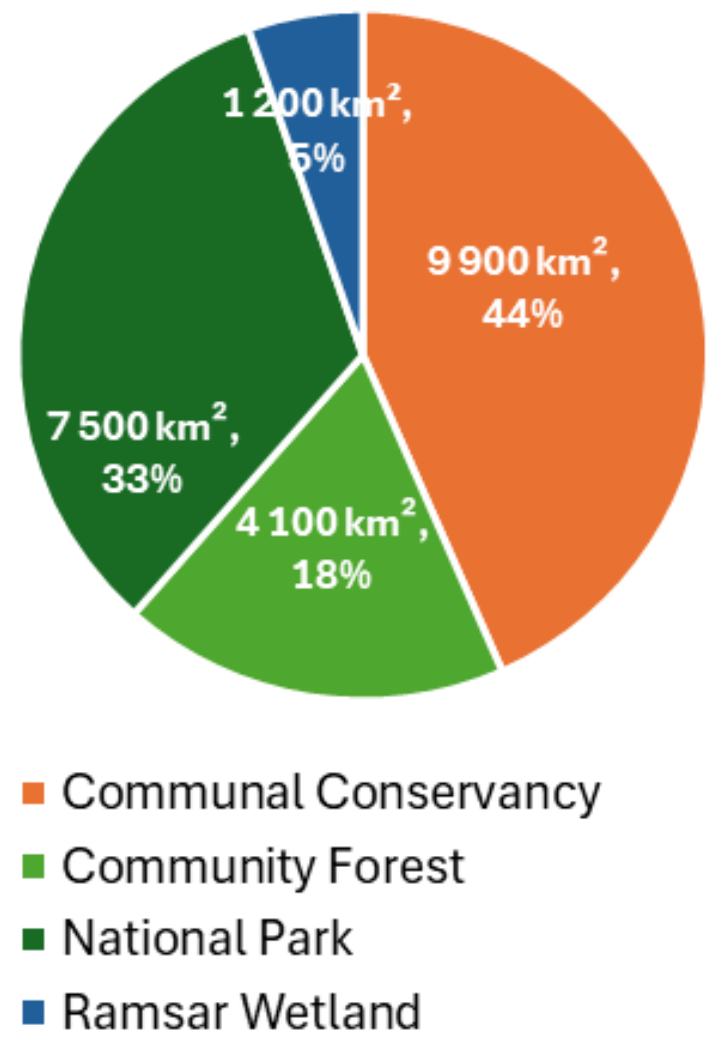
Annual fire season

The main months of the fire season in Namibia are from June to November, generally peaking in September. Most burning occurs in the drier winter months before the wet season starts. On average, around 15 000 km² burn in Namibia during the month of September. The biggest areas burned in a month were in September 2012, with 34 000 km², and September 2006, with 31 000 km², mainly in Namibia's north-central, Kavango East and West and Zambezi.



The data indicates that September is the month with the highest likelihood of wildfires, while February experiences the lowest incidence.

Namibia Average Area (km²) burned by Conservation Area



Burning in Areas under Conservation Management

Communal Conservancies are the areas under conservation management that burn the most in Namibia, followed by National Parks. Nyae Nyae Communal Conservancy burns an annual average of just under 4 000 km² every year. Notably, the last 10 years have seen a much lower occurrence of burning in Nyae Nyae. This is likely due to lower fuel loads, due to lower rainfall years. The average annual burning in N#a-Jaqla Conservancy is around 2 400 km², but has followed a similar downward trend as Nyae Nyae since 2014, but again most likely due to lower fuel loads.

Bwabwata and Etosha National Parks are the National Parks with the highest annual average in burning with 2 800 and 2 500 km² respectively. Burns do coincide with higher fuel loads, due to good rainfall years.

