
Fire as a Resource

Perceptions of Bushfires

Bushfires are an emotional issue throughout the world and usually centred on destruction with loss of life, property and environment. A common perception of bushfires is of disaster and they should be prevented.

Typical management approaches to bushfires involve suppression tactics where the lighting of fires is discouraged, firebreaks are constructed and resources are focussed toward extinguishing bushfires. This intensive and costly approach can suppress fires for a number of years until times of climatic extremes (very hot, dry and windy) when suppression tactics are ineffective. Coupled with fire fuel load (grass, leaves, etc) build up over the years of suppression, bushfires reach disastrous proportions in scale and intensity. The impact of such events far outweighs any perceived benefits the years of fire suppression may have had.

Most bushfires originate from human sources and are often regarded as a recent and unnatural phenomenon. Realistically, people have influenced fire regimes in Africa for tens of thousands of years. Ecosystems have adapted and evolved alongside these fires that are indeed a natural and integrated component of many environments.



Bushfires in Caprivi

The Caprivi Region, a semi-arid tropical savanna ecosystem with very distinct wet and dry seasons, experiences bushfires every year.

Throughout the recent past Caprivi land administrators have practiced reactive bushfire suppression tactics. This approach has led to most fires and area burnt taking place in times of climatic extremes, between August and October (~85%). The spatial pattern and timing of fires in Caprivi has been taking place for at least two decades.

Repetitive fire regimes (frequency, timing & intensity) lead to homogenous ecosystems with reduced biodiversity, productivity and land use. These effects are becoming increasingly apparent in Caprivi and involve habitat for wildlife, pasture for cattle and harvesting of natural products.

Fire as a Resource

Bushfire Management in Caprivi is taking a new direction focussing on using Fire as a Resource. Controlled Burning is used as an effective tool in managing Wildfires, Land Use and the Environment.

By taking control of when, where and how fires occur through controlled burning land managers minimise the occurrence, intensity and extent of Wildfires by reducing and fragmenting fire fuel loads.

Land use objectives are enhanced to maximise productivity and sustain the availability of resources. For example, fire is used to stimulate 'green bite' grazing for cattle or

wildlife and reduce bush encroachment to increase grazing area. Resources (ie thatching grass, timber) are sustained by balancing immediate and future availability through changing fire regimes. Fire is used to manipulate habitats to support wildlife for ecotourism and professional hunting.



Wildebeest attracted to 'Green Bite' following Fire

Commencing controlled burning in the early dry season (May – July) is important to establish a patchwork mosaic burn pattern throughout the landscape. This strategy reduces fire intensity and diversifies fire regimes by varying the Timing and Spatial pattern of fires throughout the year. Variation in fire regimes provides diversity in spatial and temporal habitat and increases biodiversity.



Patchwork Mosaic Burn Pattern

The Caprivi Community plays a pivotal role as land managers with 70% of Caprivi under Communal administration. Collaborative efforts with the Directorate of Forestry, Integrated Rural Development and Nature Conservation, Community Forestry of North Eastern Namibia, Ministry of Environment and Tourism with the local community including Communal Area Conservancies and Community Forests have been instrumental in pioneering this Bushfire Management approach.



Community implementing Controlled Burning