



© Wilderness Safaris, Okavango Delta, Botswana

8.2 Botswana

Protected and conserved areas in Botswana³⁷

Botswana has 22 protected areas covering 169,370 km² of land (UNEP-WCMC & IUCN, 2019d).

Within Botswana, land use is divided into protected areas, wildlife management areas (WMAs), pastoral residential areas, farms and mining concessions areas. As Botswana is a large country with a low population, it has been possible to establish expansive protected areas with over 45% of the country under some form of environmental management. The majority of the country's ecosystems are either moderately or well represented which means they are either within 50% or more than 100% of the 17% of the Aichi Target. A high proportion of the ecosystems falls completely within protected areas.

Since 2009 there has been some change in the cover of formal protected areas. Although there has been an increase in protected areas, there are areas where the likelihood of protected status is being diminished. These include several areas that have been listed as proposed wildlife management areas (WMAs) for more than 15 years. These have never been officially gazetted. Botswana is a part of large transfrontier conservation areas (TFCA) and this promotes the linkages and conservation goals of the country and region.

Transboundary protected and conserved areas

Botswana includes part of three transboundary conservation areas, namely Greater Mapungubwe TFCA, Kavango-Zambezi TFCA and Kgalagadi TFCA.

Policy context

A comprehensive report on legislation and policy related to protected area management, governance and equity was undertaken by the BIOPAMA programme. It identified 49 relevant laws and policies in Botswana (Tessema, 2019).

Key species³⁸

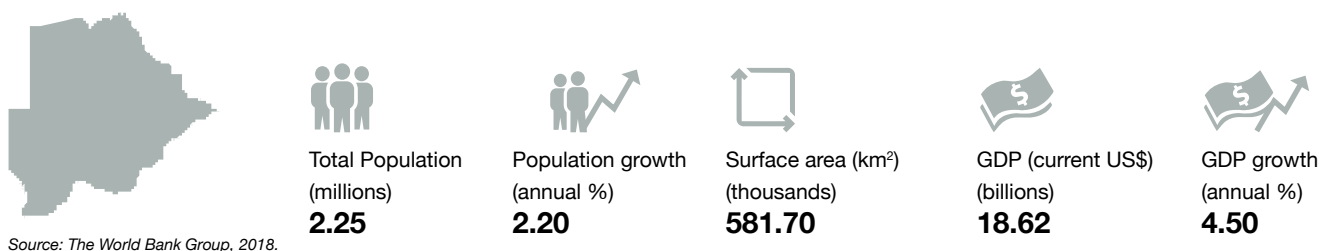
Botswana has a high biodiversity, especially in and around the Okavango Delta, with a species richness index between 9.3 and 15. Plant species are estimated at between 2,150 and 3,000, of which 15 are endemic and 43 are on the IUCN Red List.

There is a rich and diverse number of fauna with 157 identified species of mammals, of which three are endemic and 112 are red-listed. Botswana is home to one of the largest remaining populations of the African wild dog (*Lycaon pictus*) and the largest remaining population of African elephant (*Loxodonta africana*). The seasonal flood plains around the Okavango and Zambezi and extensive wilderness areas support some of the major wildlife

37 The section draws on information contained in Botswana's Sixth National Report to the CBD and Third NBSAP (Republic of Botswana, 2016 and 2019).

38 The section draws on information contained in Botswana's Fifth and Sixth National Reports to the CBD and Third NBSAP (Republic of Botswana, 2015; 2016; 2019).

Figure 8.3 Botswana Summary



Area Protected:

22 protected areas covering **169 370 km²** of land

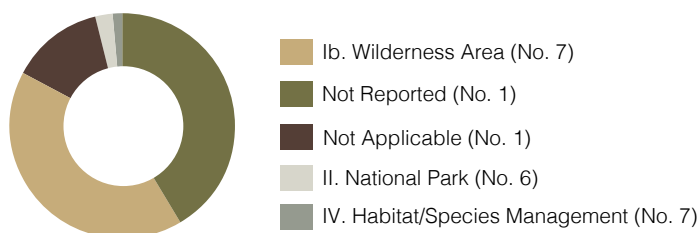
Source: UNEP-WCMC & IUCN, 2019d

Priority areas for conservation

12 sites

Source: AZE Secretariat (2019; BirdLife International, (2019b, 2019c).

Protected and conserved areas in Botswana in IUCN Management Categories



Source: UNEP-WCMC & IUCN (2019c).



157 mammal species

112 red-listed



131 reptile species



between **2 150 – 3 000 plant species**

15 endemic

43 are red-listed



587 bird species

25 are globally threatened



44 amphibian species



99 freshwater fish species

2 globally threatened

Coverage of protected areas in Botswana

Type of protected area	Area protected or conserved*	Area protected or conserved**
Terrestrial and inland water	29.14%	29.10%

* WDPA dataset

** From National Report on Biodiversity

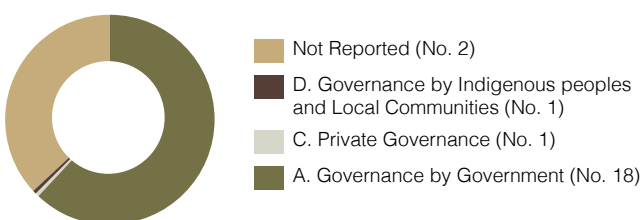
Source: Republic of Botswana (2019; UNEP-WCMC & IUCN (2019d).

National designations of protected and conserved areas in Botswana

National designation	No.	Area (km ²)
National Park	4	43 926
Game Reserve	6	60 352
Game Sanctuary	1	89
Forest Reserve	6	4 057
Bird Sanctuary	3	974

Source: UNEP-WCMC & IUCN (2019c).

Protected and conserved areas in Botswana in IUCN Governance Types



Source: UNEP-WCMC & IUCN (2019d).

Protected and conserved areas designated as global sites of importance in Botswana

Global designation	No. of sites
UNESCO World Heritage Sites (Natural or Mixed)	1
Wetlands of International Importance (Ramsar sites)	1

Source: Ramsar (2019); UNESCO (2019a, 2019b).

migration routes in Southern Africa, making Botswana one of the last refuges for species requiring open range.

Botswana is home to 587 species of birds. There are 25 globally threatened bird species in Botswana and a further eight regarded as national threatened and two near-endemic species.

Of the 99 species of freshwater fish recorded in Botswana, two are globally threatened. In addition, 131 species of reptiles and 44 species of amphibians recorded. There is little information available on invertebrates, although butterflies and dragonflies have been inventoried more closely than others.

Botswana is home to 13 endemic species of plants, with another 10 potentially endemic and seven near-endemic.

Pressures and threats³⁹

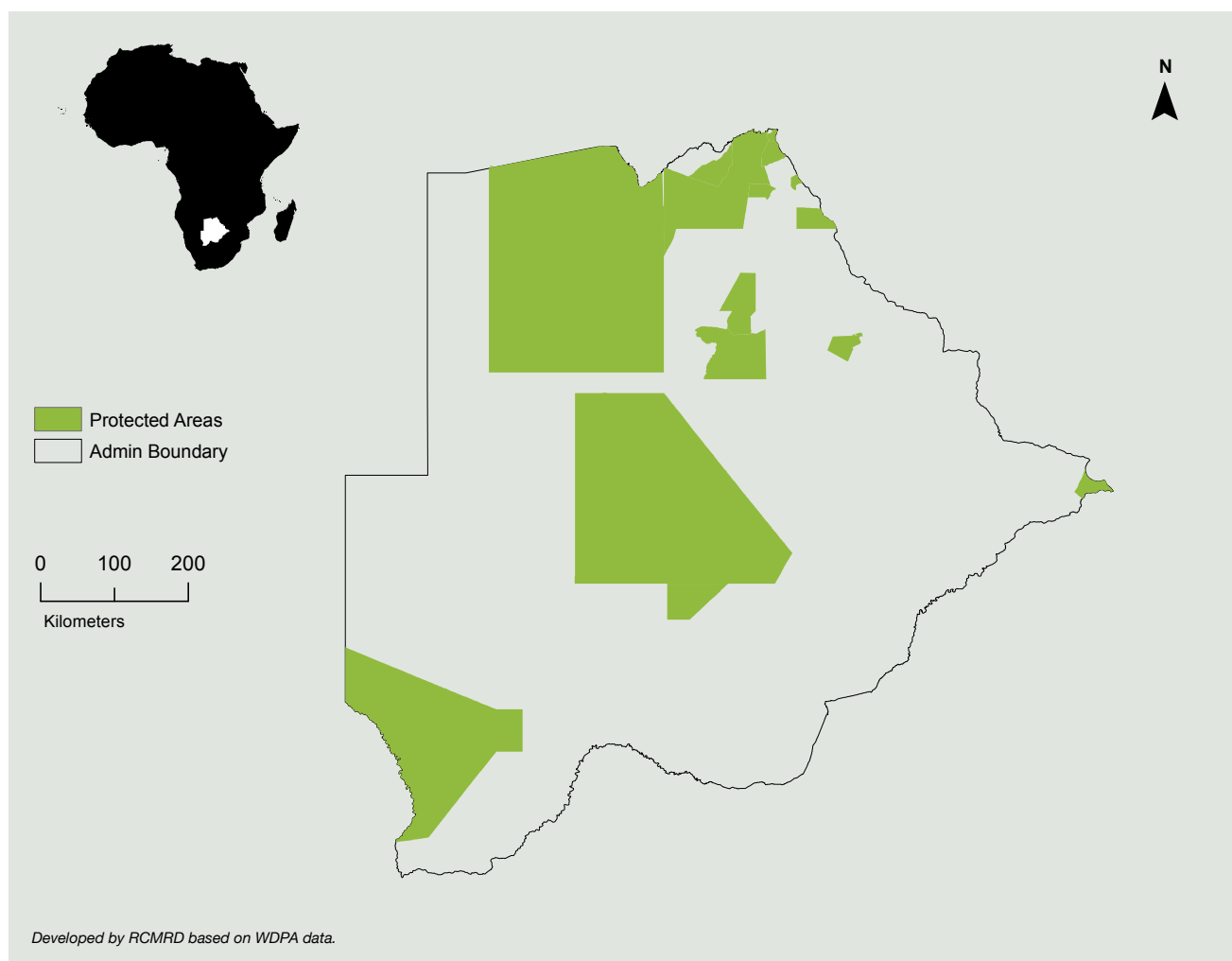
The primary threat to biodiversity in Botswana is habitat loss and degradation. The indirect causes of these threats include: overgrazing through unregulated cattle grazing; range degradation;

fires; mining; wind erosion; increased water extraction for irrigation resulting in increased salinity; lack of protection for avian breeding sites; uncontrolled tourism; and disruption of migration routes through fencing. Poaching for wildlife products and bushmeat is another serious threat to the biodiversity of the country. Human-wildlife conflict is a critical and ongoing issue in the country.

Botswana's Fifth National Report to the CBD presented the major threats to Botswana's biodiversity, linking direct threats to underlying causes, main impacts and key implications (Republic of Botswana, 2015). The report lists the primary internal threats as habitat destruction, barriers to wildlife movement, poaching, disturbed fire regimes and overharvesting, while key external threat are climate change and changes to hydrology.

Secondary threats include invasive species in both terrestrial and freshwater ecosystems. Climate change is emerging as a major threat to the Okavango Delta ecosystem and the Kalahari Basin.

Figure 8.4 Botswana protected areas



³⁹ The section draws on information contained in Botswana's Sixth National Report to the CBD and Third NBSAP (Republic of Botswana, 2016, 2019).