



Jumiko la Maliasili Tanzania

Tanzania Natural Resource Forum

INFORMATION ON WILDLIFE IN TANZANIA

**Wildlife for all Tanzanians:
Stopping the loss, nurturing
the resource and widening the
benefits**

BRIEF 1

THE END OF THE GAME? THE DECLINE AND DEPLETION OF TANZANIA'S WILDLIFE

MAIN ISSUE:

⇒ The best available scientific data suggests that wildlife is declining in all of Tanzania's main wildlife areas and ecosystems, including those which feature large protected areas such as national parks and game reserves.

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Tanzania has the foremost wildlife estate and abundance in the world

Tanzania has the most substantial large mammal populations left in any nation on the earth. Tanzania has the largest population of lions and the most buffalo. Its increasing population of elephants comes close to Botswana's as the continent's largest national herd. The wildlife herds of the Serengeti ecosystem - over 2 million zebra, wildebeest, gazelles,

and antelopes - represent perhaps the greatest concentration of wildlife left on the planet. The country has established one of the largest networks of protected areas of any country in the world, with about 30% of its total land area set aside as National Parks, Game Reserves, and Forest Reserves.

Tanzania's wildlife populations remain widespread, occurring both inside parks and reserves and outside protected areas, where wildlife co-exists with local communities on village and private lands. Wildlife underpins Tanzania's important photographic tourism industry and the tourist hunting industry, and is therefore a key economic resource for Tanzania.

Tanzania's wildlife estate

Tanzania's wildlife is managed under different tenure arrangements. Each tenure arrangement has its objectives and management challenges. These are summarised below:



The Serengeti Migration – the largest in the world

Category & objective	Manager	Proportion of Tanzania's land area
National Parks <i>Protection with non-consumptive use only</i>	State (Government Parastatal)	4.4%
Ngorongoro Conservation Area <i>Protection with multiple use but no consumptive use</i>	State (Government Parastatal)	0.9%
Game Reserves <i>Protection with consumptive and non-consumptive use</i>	State (Wildlife Division)	13.0%
Game Controlled Areas <i>Consumptive and non-consumptive use</i>	State (Wildlife Division with District Council) (GCAs frequently overlap Village Land)	5.5%
Wildlife Management Areas <i>Consumptive and non-consumptive use</i>	WMA Authorised Association on behalf of village assemblies (in consultation with member villages, Local Government Authority and Wildlife Division)	3.7%
Forest Reserves <i>Protection with some consumptive use</i>	Forestry and Beekeeping Division and District Councils	16.2%
Village Land Forest Reserves <i>Consumptive and non-consumptive use potential</i>	Village Government on behalf of village assembly	2.6%

Note: The Forest estate has been included in the data here as forests are an important component of the wildlife estate, particularly in terms of endemic biodiversity. (Data are from mixed sources, and some categories variably overlap in area)

Tanzania is losing its wildlife

Yet despite the large protected area and wildlife-related estate covering about 40 percent of the country, the latest research based on data collected under the auspices of the Tanzania Wildlife Research Institute (TAWIRI) and published in international scientific journals, provides a clear illustration of the nature, extent, and distribution of how Tanzania is gradually losing its wildlife.



A wildlife count done by aerial survey over the Tarangire ecosystem

This data is based on aerial surveys carried out across Tanzania's main wildlife areas - including both the protected areas and some of the village lands surrounding the protected areas. The data from these surveys was collected from the late 1980s until the early 2000s. The data therefore shows how and where wildlife is increasing or decreasing over the course of about a ten year period.

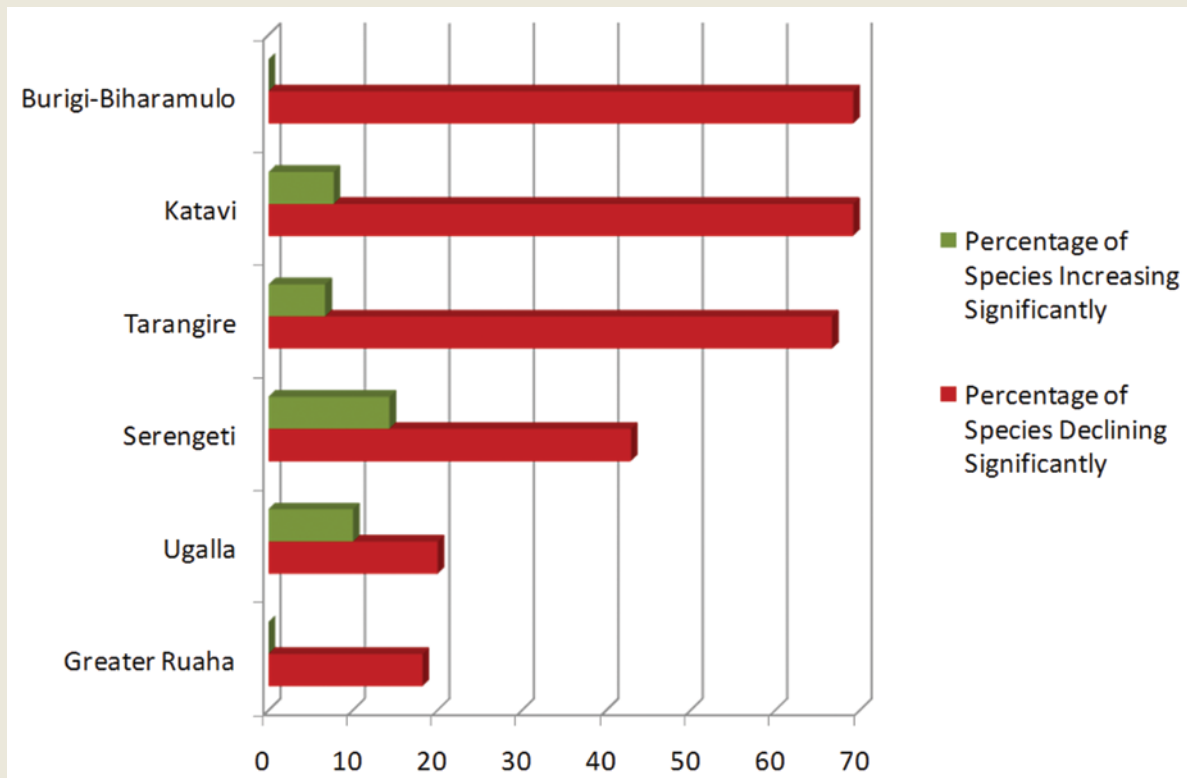
The data in Figure 1 makes it clear that in all of Tanzania's main wildlife areas, more species of wildlife are decreasing in abundance than are increasing.

In addition:

⇒ The dry season counts in the Greater Ruaha ecosystem record about 73% of species as declining significantly, and only about 9% of species as increasing significantly.

⇒ In the Tarangire ecosystem, 46% of species showed declines in the dry season counts, with no species increasing. In the wet season counts, about 68% of species declined while about 7% of species increased.

Figure 1: The proportion of wildlife declining and the proportion of wildlife increasing in different geographic areas of Tanzania, based on aerial survey data (wet season counts) late 1980s to early 2000s



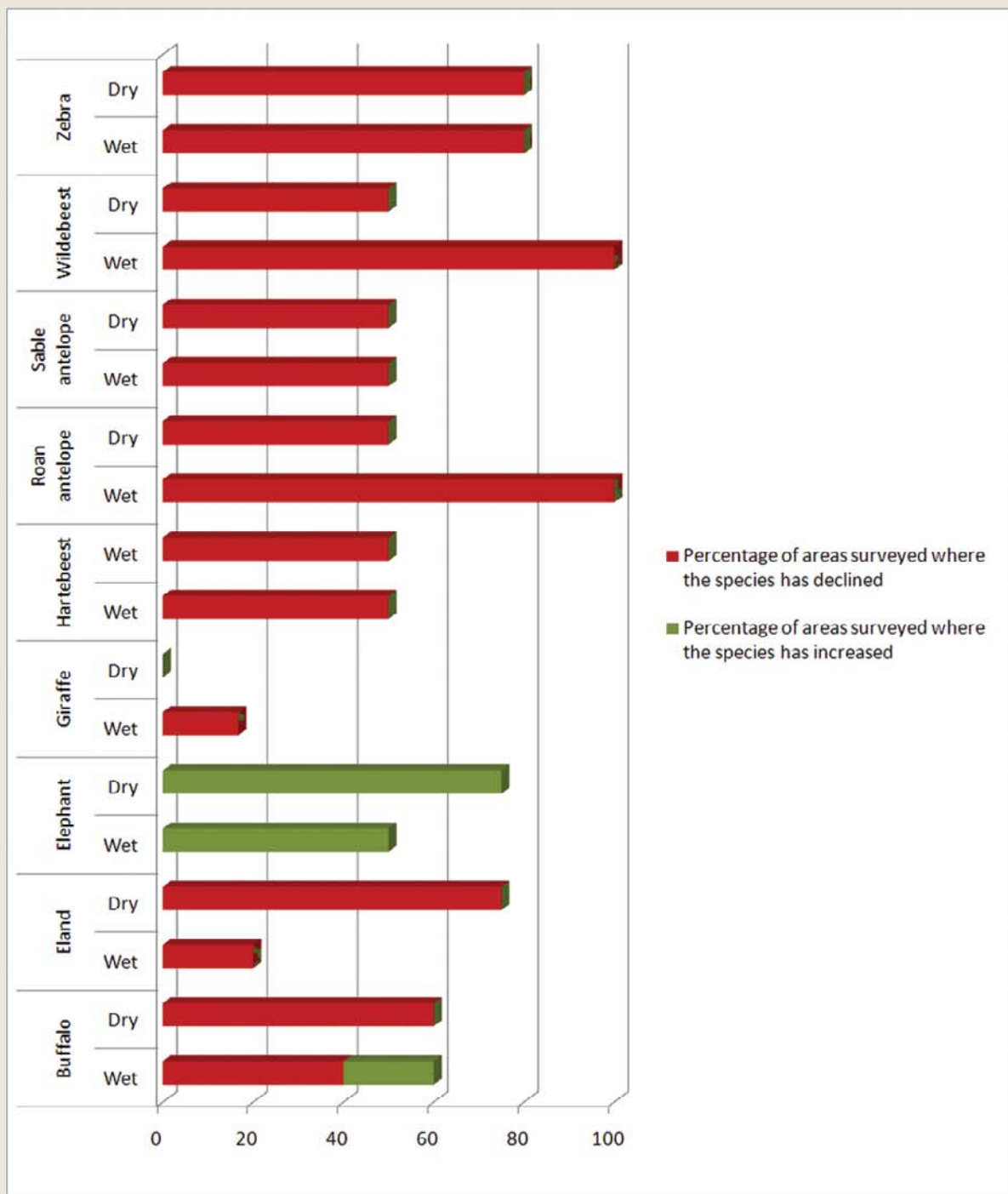
Note: Declining species are highlighted in red and increasing species are highlighted in green. This graph only includes the proportion of decreases and increases which are statistically significant, which is why the numbers in the charts do not add up to 100%.

The continuing decline in wildlife populations in the country's key wildlife ecosystems will have serious economic consequences for the nation.

The Tarangire ecosystem (this includes Tarangire National Park and surrounding village land) is a key component of the northern tourism circuit, while Ruaha is the largest National Park in Africa, located in the rapidly growing southern tourism circuit.

The largest proportion of species declined in the Burigi-Biharamulo survey area, where about 69% of species declined in the wet season counts and 80% declined in the dry season counts, with zero species increasing in either. In Burigi-Biharamulo, these overwhelming declines over time are most likely linked to the influx of refugees to the area from Rwanda during the mid-1990s, and the uncontrolled exploitation of wildlife that has been reported from that area as a result. Figure 2 shows a selection of

Figure 2: Percentage of surveyed areas where species of large mammal have declined and increased from the late 1980s to early 2000s



Note: Declining species are highlighted in red and increasing species are highlighted in green. The species surveyed are Zebra, Wildebeest, Sable antelope, Roan antelope, Hartebeest, Giraffe, Elephant, Eland and Buffalo.

Not only are wildlife populations in decline in all of Tanzania's main wildlife ecosystems, but most species of large mammals are decreasing in abundance.

species undergoing population declines and increases during the roughly 10 year survey period.

Based on this data set, all of the antelopes and zebra have declined overall.

For example:

⇒ Zebra, which are one of the most widespread and abundant species in many Tanzanian areas, declined in 80% of survey zones during both wet and dry season counts. There was no record of an increase in Zebra anywhere. This suggests that zebra are widely declining across Tanzania.

⇒ Some species of antelope such as roan and sable are particularly important for tourist hunting. These species are also undergoing declines. Data shows that sable declined in half of all survey areas and did not increase in any. Roan declined in all wet season survey areas.

⇒ Giraffe have been mostly stable, while elephants increased in most of the survey zones. The reason for the increase in elephants is that when these surveys started, in the late 1980s, elephants were subject to widespread poaching in Tanzania for their ivory. Following the banning of the ivory trade and the improvement of internal law enforcement from 1989 onwards, elephant numbers have widely recovered.

Brief 2 provides an analysis of the underlying causes

The best available scientific data suggests that wildlife is declining in all of Tanzania's main wildlife areas and ecosystems, including those which feature large protected areas such as National Parks and Game Reserves.

The data also indicates that most species, with the exception of giraffes and elephants, have undergone widespread declines in their populations since the mid 1980s.

for these declining wildlife populations.

This information brief is based on a selective summary of data published in: Stoner, C., T. Caro, S. Mduma, C. Mlingwa, G. Sabuni, M. Borner, and C. Schelten. 2007. Changes in large herbivore populations across large areas of Tanzania. African Journal of Ecology 45: 202-