

Supplementary Materials

Table S1. Research and populations by country.

Country	Total Population	Percentage of Total Population	Total Research Published	Percentage of Research
Botswana	131626	31.68	49	9.12
Zimbabwe	82630	19.89	52	9.68
Tanzania	50433	12.14	46	8.57
Kenya	22809	5.49	109	20.30
Namibia	22754	5.48	23	4.28
Zambia	21967	5.29	13	2.42
South Africa	18841	4.54	153	28.49
Mozambique	10884	2.62	8	1.49
South Sudan	7103	1.71	1	0.19
Burkina Faso	6850	1.65	7	1.30
Uganda	4923	1.19	5	0.93
Angola	3396	0.82	1	0.19
Benin	2984	0.72	9	1.68
Malawi	1307	0.31	2	0.37
Ethiopia	1017	0.24	8	1.49
Chad	794	0.19	1	0.19
Mali	253	0.06	2	0.37
Rwanda	88	0.02	0	0.00
Swaziland	42	0.01	1	0.19
Senegal	1	0.00	0	0.00
Eritrea	0	0.00	4	0.74

The most research on elephants published in the last 20 years was done in South Africa [28.5%] and Kenya [20.3%] while respectively having 4.5- and 5.5% of the total population. The countries with the highest elephant population are Botswana [31.7%] and Zimbabwe [19.9%] and have published 9.1- and 9.7% of research.

Table S2. Areas with the most research published.

Area	Total Population	Percentage of Population	Total Research Published	Percentage of Research
Kruger National Park	17086	4.11	64	12.21
Other Private Reserves	2482	0.60	51	9.73
Laikipia-Samburu Ecosystem	6365	1.53	44	8.40
Northern Botswana	129939	31.28	44	8.40
Amboseli Ecosystem	1656	0.40	31	5.92
Hwange National Park	45846	11.04	28	5.34
Addo Elephant Park	595	0.14	21	4.01
Tsavo National Park	9504	2.29	20	3.82
Serengeti Ecosystem	6087	1.47	16	3.05
Etosha National Park	2911	0.70	14	2.67
Rest of Zambezi Valley	8200	1.97	14	2.67
Pilanesburg Provincial Reserve	240	0.06	12	2.29
Tembe Elephant Park	220	0.05	10	1.91

The areas with the most research on elephants being published in the last 20 years are Kruger National Park [12.2%] and Other Private Reserves [9.7%] which are all located around Kruger National Park and both are in South Africa and have 4.5- and 0.6% of the total elephant population.

Table S3. Areas with the highest elephant population.

Area	Total Population	Percentage of Population	Total Research Published	Percentage of Research
Northern Botswana	129939	31.27834	44	8.396947
Hwange National Park	45846	11.03585	28	5.343511
Kruger National Park	17086	4.112867	64	12.21374
Ruaha - Runga Ecosystem	14284	3.438382	6	1.145038
Selous - Mikumi Ecosystem	14040	3.379647	9	1.717557
Zambezi Region	13116	3.157226	4	0.763359
Gornarezhou National Park	11120	2.676757	6	1.145038
Tsavo National Park	9504	2.287761	20	3.816794
Laikipia-Samburu Ecosystem	6365	1.532155	44	8.396947
Serengeti Ecosystem	6087	1.465236	16	3.053435
Luangwa Game Management Areas	5869	1.41276	1	0.19084
Jonglei National Park	5644	1.358599	0	0

The areas with the highest elephant population are Northern Botswana [31.3%] and Hwange National Park in Zimbabwe [11%] and have produced 8.4- and 5.3% of elephant research in the last 20 years.

Table S4. Fencing status of included areas.

Fencing Status	Total Population	Percentage of Population	Total Research Published	Percentage of Research
Fenced	31096	7.5	132	26.08695652
Partially fenced	268510	64.4	155	30.63241107
Unfenced	117529	28.2	219	43.28063241

The areas with the highest elephant population are partially fenced [64.4%] followed by unfenced [28.2%] and fenced [7.5%] have produced 30.6-, 43.3- and 26% of elephant research in the last 20 years.

Table S5. Management/ownership status of included areas.

Management Status	Total Population	Percentage of Population	Total Research Published	Percentage of Research
Publicly [government/state]	120563	28.9	266	52.56916996
Privately	25226	6	86	16.99604743
Joint	271346	65	154	30.43478261

The areas with the highest elephant population are jointly managed [65%] followed by publically managed [28.9%] and privately [6%] have produced 30.4-, 52.6- and 16.9% of elephant research in the last 20 years.

Table S6. Proportion of each country's elephant population that has not been researched in the last 20 years.

Country	Total Number of Areas	Total Places without Research	Percent of Places without Research
Namibia	6	1	16.66666667
South Africa	24	7	29.16666667
Botswana	3	1	33.33333333
Kenya	24	8	33.33333333
Tanzania	25	12	48
Malawi	8	4	50
Rwanda	2	1	50
Zambia	16	8	50
Benin	5	3	60
Swaziland/Eswatini	3	2	66.66666667
Uganda	12	8	66.66666667
Ethiopia	10	7	70
Zimbabwe	36	26	72.22222222
Angola	4	3	75
Mozambique	16	12	75
South Sudan	5	4	80
Burkina Faso	9	8	88.88888889
Chad	14	13	92.85714286
Eritrea	1	1	100
Senegal	1	1	100

The areas with the highest elephant population are jointly managed [65%] followed by publically managed [28.9%] and privately [6%] have produced 30.4-, 52.6- and 16.9% of elephant research in the last 20 years.

Table S7. Count of the topic of research papers for the countries with the highest elephant populations.

Botswana	Behaviour	11
	Climate Interactions	2
	Ecology	25
	HEC	8
	Poaching	1
Kenya	Behaviour	27
	Climate Interactions	5
	Ecology	27
	HEC	32
	Poaching	11
Mozambique	Behaviour	3
	Climate Interactions	0
	Ecology	1
	HEC	2
	Poaching	1
Namibia	Behaviour	12
	Climate Interactions	4
	Ecology	3
	HEC	3
	Poaching	0

South Africa	Behaviour	64
	Climate Interactions	6
	Ecology	66
	HEC	3
	Poaching	1
Tanzania	Behaviour	10
	Climate Interactions	2
	Ecology	15
	HEC	12
	Poaching	4
Zambia	Behaviour	1
	Climate Interactions	2
	Ecology	3
	HEC	4
	Poaching	3
Zimbabwe	Behaviour	7
	Climate Interactions	11
	Ecology	24
	HEC	7
	Poaching	3