

Trends in elephant population

- Estimates of elephant numbers are used to evaluate trends of population growth or decline, compare population status in different parts of elephant range within countries, regions and across the continent.
- Due to elephant's reproductive biology, elephant population estimates are conducted after every three years.
- Different survey types have been employed for assessment of elephant populations in different habitats over the years.
- Kenyan elephant population has been surveyed through the use of individual elephant registration, aerial total and sample counts, total ground counts and dung density surveys using Fecal Standing Crop (FSC) approach.

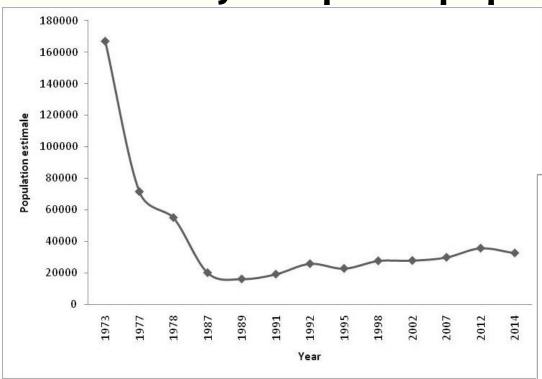


Elephant population status

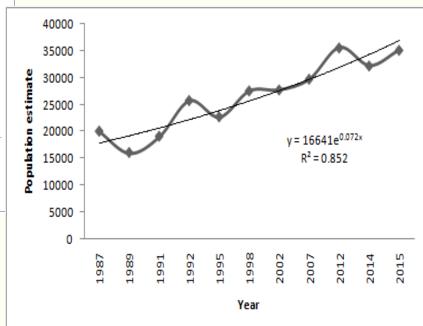
- Estimating and evaluating the quality of the range of elephant populations is central to their conservation
- Existing and emerging anthropogenic factors have lead to the decline in habitat quality and fragmentation through loss of connectivity
- In the 70's and 80's, there was a drastic decline of the elephant population from over 160,000 to 16,000 in 1989
- As at December 2015, there was a national elephant population of 35,149 elephants which represents a 2.73% annual increase since 1989



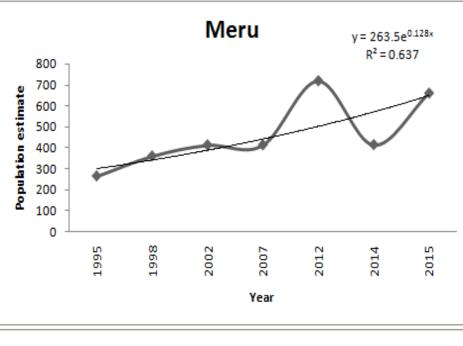
Kenya elephant population trends

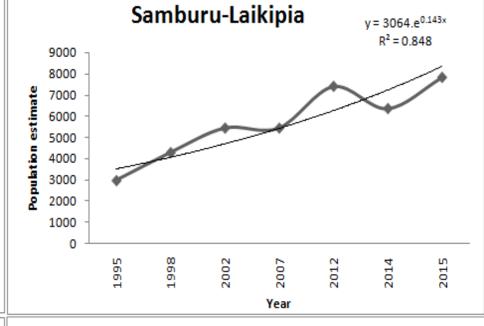


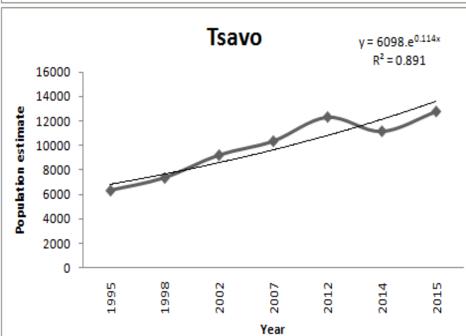
Inconsistency in survey of forest populations

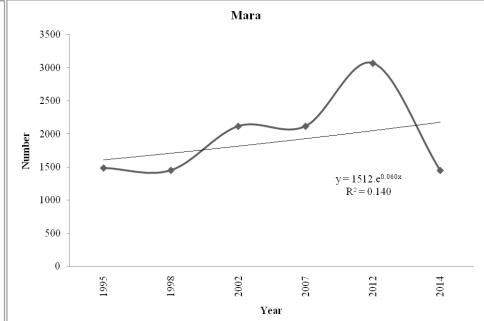








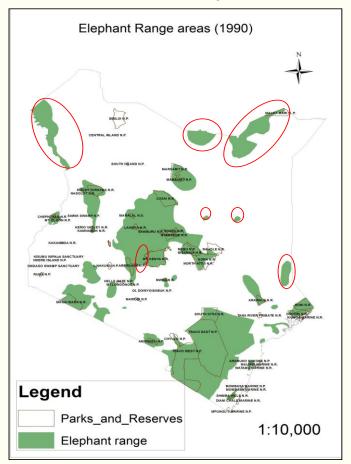


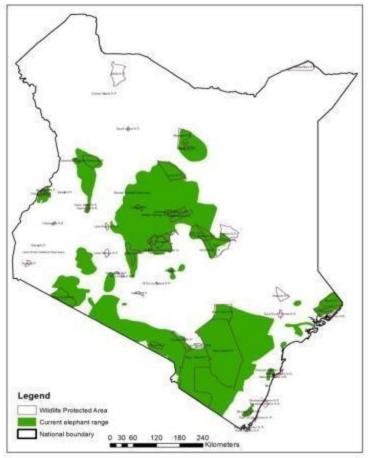




Input Zone	survey type	Year	Population estimate	
Amboseli ecosystem	Sample aerial count	2015	1736	
Kerio Valley dispersal area	Sample aerial count	2015	311	
Lamu District	Aerial total Count	2015	60	
Meru National Park	Aerial total Count	2015	659	M 1 1 / 1/ ' /
Mwea National Reserve	Aerial total Count	2015	71	A I Alamhant namiliation inmit zanaa
Nasalot S Turkana, Rimoi & Kamnarok National Reserves	Sample aerial count	2015	351	"DZ CICINIANI DODUNALION MODUL ZONICS
Samburu-Laikipia ecosystem	Sample aerial count	2015	7835	or are brown had a market mine as ration
Bisanadi National Reserve	Aerial total Count	2014	0	
Chyulu National Park	Sample aerial count	2014	0	(A #A / A 4 1 4 4 A #
Kora National Park	Aerial total Count	2014	0	
Marsabit National Park	Dung count	2014	100	n / ¬V» AT naniigitang nat linagtea far aver ¬ vegru
Masai Mara Dispersal	Aerial total Count	2014	552	N.C., JOHN HUMAHUM HULUHUMUH HULUHUM HULUH HULU
Masai Mara National Reserve	Aerial total Count	2014	876	AND AND AND MINITARY TO A MANAGEMENT OF ALL AND
Meru Dispersal	Aerial total Count	2014	2	11 1
Narok North	Aerial total Count	2014	20	
Tsavo Dispersal	Sample aerial count	2014	1649	
Tsavo National Park	Sample aerial count	2014	11119	
Magadi Ecosystem	Aerial total Count	2013	30	
Shimba hills ecosystem	Aerial total Count	2012	274	
South Kitui National Reserve	Aerial total Count	2011	0	
Mt Kenya National Park & forest Reserve	Dung count	2010	3755	
Mwingi National Reserve	Aerial total Count	2007	0	
Rahole National Reserve	Aerial total Count	2007	27	
Transmara forests	Dung count	2007	513	
Aberdare Dispersal	Informed guess	2005	1700	
Aberdare National Park	Informed guess	2005	1840	
Kipipiri Forest Reserve	Informed guess	2005	13	
Tana River Primate National Reserve	Other Guess	2005	30	
Arabuko Sokoke Forest	Dung count	2002	184	
Mt Elgon National Park & forest	Informed guess	2002	139	
North Kitui National Reserve	Aerial total Count	2002	0	
Tana River Delta	Informed guess	2002	20	
Boni & Dodori National Reserves	Dung count	2000	50	KENYA
Loroki Forest	Dung count	1997	210	WILDLIFE
Mau Forest Complex	Dung count	1995	1003	SERVICE IT ID

Changes in elephant range areas between the years 1990 and 2015

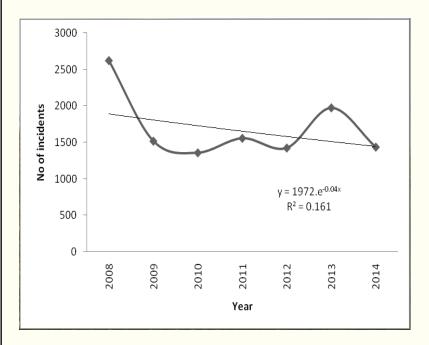






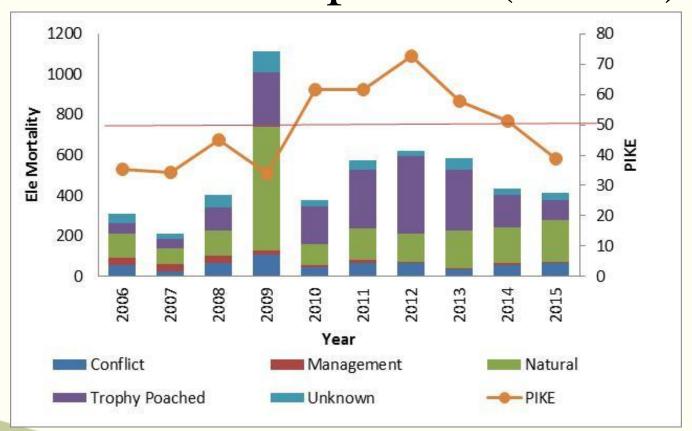
Elephant Mortality-2014 CENTRAL I&LAND N.P. SOUTH ISTAND N.P. KISUMU IMPALA SANCTUARY NDERE ISLAND N.P. ONDAG SWAMP SANCTUARY OL DOINYOMBABUK N.P. ALINDI MARINE N.P. ALIN**O MA**RINE N.R. Legend MOMBASAMARINE N.P. MOMBASAMARINE N.R. Elephant carcass Parks_and_Reserves kenya boundary 1:5,000,000 EleRange90sAED

Elephant Mortality





Monitoring of Illegal Killing of Elephants (MIKE) -Tsavo (0.43-

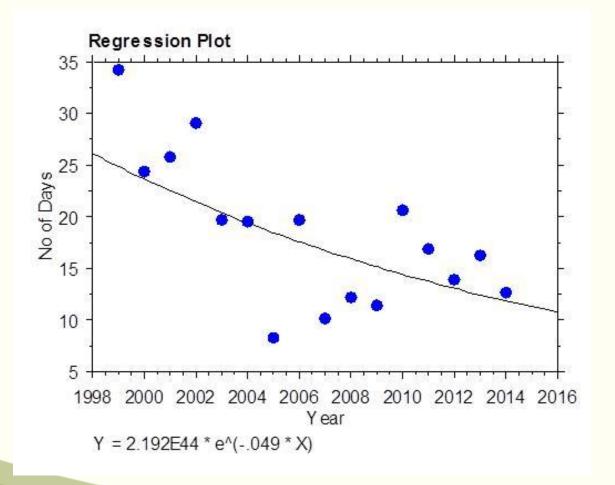


-Tsavo (0.43±0.17 (n=1322 cases)) & -Mountain (0.45±0.13 (n=1896 cases)) conservation areas low on PIKE Western (0.69±0.14 (n=94 cases)) and

western (0.69±0.14 (n=94 cases)) and Central rift (0.67±0.14 (n=489 cases)) conservation areas had the highest PIKE



Efforts to combat poaching



- •Enhanced security
- •Standardized Monitoring
- •HEC intervention
- •Legislation
- Technology
- •Cross border collaboration



